

#### tpSEF Inc.

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May 20, 2020

#### **By CFTC Portal**

Mr. Chris Kirkpatrick Office of the Secretariat Commodity Futures Trading Commission Three Lafayette Centre 1155 21st Street, N.W. Washington, D.C. 20581

#### Re: <u>tpSEF Inc. – Regulation 40.6(d) Weekly Notification of Rule Amendments (tpSEF</u> <u>Submission #20-07R)</u>

Dear Mr. Kirkpatrick:

Pursuant to Section 5c(c) of the Commodity Exchange Act and Section 40.6(d) of the regulations of the Commodity Futures Trading Commission (the "Commission"), tpSEF Inc. hereby notifies the Commission that it has made certain non-substantive revisions to Appendix B of the tpSEF Rulebook (tpSEF Inc. Swap Specifications) effective as of May 15, 2020. Specifically, tpSEF has made the following changes:

- (i) Added the terms and conditions for the products listed in <u>Exhibit I</u> hereto, which terms and conditions were separately filed with the Commission pursuant to CFTC Regulation 40.2(a); and
- (ii) Updated the Appendix B effective date.

Attached as <u>Exhibit II</u> hereto is a clean copy of Appendix B, as amended, and attached as <u>Exhibit III</u> is a marked copy of Appendix B showing changes to the prior version.

Mr. Christopher J. Kirkpatrick May 20, 2020 Page 2



Questions regarding this submission should be directed to Brian D. Donnelly, Chief Compliance Officer, at (201) 984-6956 or by email at bddonnelly@tullettprebon.com.

Very truly yours,

tpSEF Inc.

1 By:

Name: Brian D. DonnellyTitle: Chief Compliance OfficerDate: May 20, 2020

Enclosures

cc: CFTC Division of Market Oversight (dmosubmissions@cftc.gov) Nancy Markowitz, CFTC (nmarkowitz@cftc.gov)

## EXHIBIT I

## List of Added Products

- 1.
- 2.
- 3.
- 4.
- Commodity Index Swaps Dow Jones Commodity Index Corn Commodity Index Swaps Dow Jones Commodity Index Sugar Commodity Index Swaps Dow Jones Commodity Index Live Cattle Commodity Index Swaps Dow Jones Commodity Index All Wheat Commodity Index Swaps Bloomberg Soybean Meal Subindex 1 Month Forward 5.

Mr. Christopher J. Kirkpatrick May 20, 2020

# EXHIBIT II

tpSEF Rulebook – Appendix B (Clean)

tpSEF Inc. Rulebook Appendix B

# tpSEF Inc. Swap Specifications

Effective May 15, 2020

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# **Agricultural Options**

Summary:	This covers uncleared agricultural options ("Agricultural Options").		
Limitations on Available Selections and Default The terms under which Agricultural Op			
Settings: traded are shown below and in the attached t			
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards: 2005 ISDA Commodity Derivatives Definitions ("Commodity Definitions")		
Product Type/ISDA OTC Taxonomy:	· · · · ·		
ISDA OTC Asset Class:	Commodity		
ISDA OTC Base Product:	Agricultural		
ISDA OTC Settlement type:	Cash		
Further Limitations:	None		
Terms:			
Trade Date:	As agreed by the parties.		
Commodity:	As specified by the parties from among the Available Commodities.		
Notional Quantity:	The sum of the Notional Quantities per Calculation Period.		
Notional Quantity per Calculation Period:	For an Asian Option, as specified by the parties on a per- Calculation-Period Basis.		
Calculation Period(s):	For an Asian Option, as specified by the parties.		
Calculation Period Business Days:	None, unless specified by the parties.		
Calculation Period Business Day Convention:	For an Asian Option, as specified by the parties from among the Available Business Day Conventions.		
Option Style:	As specified by the parties from among the Available Option Styles.		
Option Type:	As specified by the parties from among the Available Option Types.		
Buyer:	As specified by the parties.		
Seller:	As specified by the parties.		
Commodity Reference Price:	As specified by the parties from among the Available Commodity Reference Prices.		
Business Day:	As specified by the parties.		
Pricing Date(s):	As specified by the parties.		
Method of Averaging:	For Asian Options, as specified by the parties or otherwise per the Commodity Definitions.		
Strike Price per Unit:	As specified by the parties.		
Total Premium:	As specified by the parties.		
Premium Payment Date(s):	As specified by the parties, subject to adjustment in accordance with the Business Day Convention.		
Premium Payment Date Business Days:	Per the Available Currencies, plus such additional Business Days as the parties specify.		
Premium Payment Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions or otherwise per the Commodity Definitions.		

Procedure for Exercise:		
Exercise Period:	For an American Option, the period of days and the	
	times on such days specified by the parties.	
	For any other Option Style, the times on the Expiration	
	Date or Potential Exercise Date specified by the parties.	
Potential Exercise Dates:	For a Bermuda Option, the days specified by the parties.	
Expiration Date:	As specified by the parties.	
Expiration Time:	As specified by the parties.	
Automatic Exercise:	Applicable, unless otherwise specified by the parties.	
Written Confirmation:	As specified by the parties.	
Seller's Notice Information:	As specified by the Seller.	
Market Disruption:		
Market Disruption Events:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Additional Market Disruption Events:	As specified by the parties.	
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Disruption Fallbacks:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Fallback Reference Price:	None, unless specified by the parties.	
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Cash Settlement Terms:		
Cash Settlement:	Applicable	
Settlement Dates:	As specified by the parties, subject to adjustment in	
	accordance with the Business Day Convention.	
Calculation Agent:	As agreed by the parties.	

## Agricultural Option Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)	
USD	United States Dollars	USNY	
EUR	Euro	EUTA	
GBP	Sterling	GBLO	

## Agricultural Options Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

## Agricultural Option Available Option Style

ISI	DA Name
American	
European	
Bermuda	
Asian	

## Agricultural Options Available Commodity Reference Prices

#### **ISDA Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

ISDA Definition		
COCOA-GBP-EURONEXT		
COCOA-NYBOT <sup>1</sup>		
COFFEE ARABICA-NYBOT <sup>1</sup>		
COFFEE ROBUSTA-EURONEXT		
CORN-CBOT		
COTTON NO. 2-NYBOT <sup>1</sup>		
FROZEN CONCENTRATED ORANGE JUICE NO. 1-NYBOT <sup>1</sup>		
LEAN HOGS-CME		
MILK-CLASS III-CME		
MILK-CLASS IV-CME		
SOYBEAN-CBOT		
SOYBEAN MEAL-CBOT		
SOYBEAN OIL-CBOT		
SUGAR #11 (WORLD)-NYBOT <sup>1</sup>		
WHEAT-CBOT		
WHEAT HRM-KCBOT		
WHITE SUGAR-EURONEXT		

### **Exchange Definitions**

The following Commodity Reference Prices are as defined in the Commodity Price Reference Framework in Sub-Annex A to the Commodity Definitions.

ISDA Definition					
Commodity Reference Price	Relevant Commodity	Relevant Unit	Exchange	Currency	Specified Price
BUTTER-CME	Butter	Pound	CME Globex	USD 0.01	Settlement Price
CHEESE-CME	Cheese	Pound	CME Globex	USD 0.01	Settlement Price
CRUDE PALM OIL-CME	Crude Palm Oil	Metric Ton	CME Globex	USD 0.01	Settlement Price
DRY WHEY- CME	Dry Whey	Pound	CME Globex	USD 0.01	Settlement Price
HARD RED SPRING WHEAT- MGEX	Wheat	Bushel	Minneapolis Grain Exchange	USD 0.01	Settlement Price
MILLING WHEAT- EURONEXT	Wheat	Tonne	EURONEXT LIFFE	EUR 0.01	Settlement Price
NONFAT DRY MILK-CME	Non-Fat Dry Milk	Pound	CME Globex	USD 0.01	Settlement Price
RAPESEED- EURONEXT	Rapeseed	Tonne	EURONEXT LIFFE	EUR 0.01	Settlement Price

<sup>&</sup>lt;sup>1</sup>The New York Board of Trade (NYBOT) was renamed ICE Futures US in 2007.

# <u>Basis Swaps</u>

This covers basis swaps ("Basis Swaps").The terms under which a Basis Swap may be traded are
as specified in these terms and conditions and in the
attached tables.
For amounts or rates, the relevant term connect he loss
For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even
Increment and cannot exceed the Maximum; for a date,
the date cannot be earlier than Earliest nor later than
Latest.
For Business Days, the defaults shall be the locations specified for the relevant currency, any additional
locations specified for the relevant Floating Rate
Options.
The parties may add additional locations from the
Available Locations and may eliminate some or all of
the other locations, so long as there is at least one
location in which payment may be made. For these purposes "TARGET" is considered a location.
purposes TAROLT is considered a location.
In many cases there are normal "vanilla" terms on which
the parties will transact. These are shown as "Default"
and will apply unless the parties vary them.
It should be noted that these contracts can be traded in a
variety of currencies. Since each national market has its
own peculiarities, the "Available Terms" and/or "Default
Terms" may vary by currency.
In some coses the source contract wight have different
In some cases, the same contract might have different terms depending on the market in which it is traded ( <i>e.g.</i> ,
London versus NY). In that case the default settings may
vary by market.
This contract description incorporates by reference the
following industry standard documentation and
standards:
(a) 2006 ISDA Definitions
(b) ISDA Settlement Matrix (if Optional Early Termination applies)
(c) ISDA OTC Taxonomies
(d) FpML Location Codes
For convenience, certain terms are mapped to their
FpML 5.5 equivalent.
Interest Rate
IR Swap
Basis
None

Terms:	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see
	below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Effective Date as
	a number of Business Days or Banking Days from the
	Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available
Effective Date Busiliess Days.	Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available
Effective Date Business Day Convention.	
Touring time Data ("Manual and in Data")	Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Termination
	Date as a number of days, months or years from the
	Effective Date ("relativeTerminationDate").
Termination Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Floating Amount 1 ("FA1"):	
FA1 Payer ("payerPartyReference"):	As specified by the parties.
FA1 Currency Amount ("notionalAmount"):	As specified by the parties.
FA1 Period End Dates ("unadjustedCalculation Period	As specified by the parties.
Date"):	
FA1 first Period End Date:	As specified by the parties if there is a short initial
	Calculation Period.
FA1 Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
FA1 initial Floating Rate:	As specified by the parties.
FA1 Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
FA1 Designated Maturity ('indexTenor"):	As specified by the parties.
FA1 Linear Interpolation:	For the Calculation Periods specified by the parties.
FA1 Shorter Designated Maturity for Linear	For a Calculation Period to which Linear Interpolation
Interpolation:	applies, as specified by the parties.
FA1 Longer Designated Maturity for Linear	For a Calculation Period to which Linear Interpolation
Interpolation:	applies, as specified by the parties.
FA1 Spread:	As specified by the parties.
FA1 Day Count Fraction:	As specified by the parties.
FA1 Reset Dates ("resetDate"):	As specified by the parties.
FA1 Method of Averaging:	As specified by the parties.
FA1 Compounding:	As specified by the parties.
FA1 Compounding Dates:	In the event Compounding is selected, as selected by the
The compounding Ducos.	parties.
FA1 Compounding Method (Compounding OR Flat	In the event Compounding is selected, as selected by the
Compounding):	parties.
	*
FA1 Period End Dates Business Days:	As specified by the parties from among the Available
	Business Days.
FA1 Period End Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
FA1 Payment Dates Business Days:	As specified by the parties from among the Available
	Business Days, subject to any Required Business Days
FA1 Payment Dates Business Day Convention:	As specified by the parties from among the Available
-	Business Day Conventions.
FA1 Reset Dates Business Days:	As specified by the parties from among the Available

FA1 Reset Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Floating Amount 2 ("FA2"):	
FA2 Payer ("payerPartyReference"):	As specified by the parties.
FA2 Currency Amount ("notionalAmount"):	As specified by the parties.
FA2 Period End Dates ("unadjustedCalculation Period	As specified by the parties.
Date"):	
FA2 first Period End Date:	As specified by the parties if there is a short initial
	Calculation Period.
FA2 Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
FA2 initial Floating Rate:	As specified by the parties.
FA2 Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
FA2 Designated Maturity ("indexTenor"):	As specified by the parties.
FA2 Linear Interpolation:	For the Calculation Periods specified by the parties.
FA2 Shorter Designated Maturity for Linear	For a Calculation Period to which Linear Interpolation
Interpolation:	applies, as specified by the parties.
FA2 Longer Designated Maturity for Linear	For a Calculation Period to which Linear Interpolation
Interpolation:	applies, as specified by the parties.
FA2 Spread:	As specified by the parties.
FA2 Day Count Fraction:	As specified by the parties.
FA2 Reset Dates ("resetDate"):	As specified by the parties.
FA2 Method of Averaging:	As specified by the parties.
FA2 Compounding:	As specified by the parties.
FA2 Compounding Dates:	In the event Compounding is selected, as selected by the
	parties.
FA2 Compounding Method (Compounding OR Flat	In the event Compounding is selected, as selected by the
Compounding):	parties.
FA2 Period End Dates Business Days:	As specified by the parties from among the Available
	Business Days.
FA2 Period End Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
FA2 Payment Dates Business Days:	As specified by the parties from among the Available
	Business Days, subject to any Required Business Days.
FA2 Payment Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
FA2 Reset Dates Business Days:	As specified by the parties from among the Available
	Business Days, subject to any Required Business Days.
FA2 Reset Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Mark-to-Market Currency Swap:	
Mark-to-Market Currency Swap:	As specified by the parties, if the Currency Amounts are
V. dala Communication	in different Currencies.
Variable Currency Payer:	As specified by the parties if the transaction is a Mark-
Constant Commence Descent	to-Market Currency Swap.
Constant Currency Payer:	As specified by the parties if the transaction is a Mark-
Cumonay Eychanga Data:	to-Market Currency Swap.
Currency Exchange Rate:	As specified by the parties if the transaction is a Mark-
	to-Market Currency Swap and ISDA MTM Matrix is not
ISDA MTM Matrix:	applicable. As specified by the parties if the transaction is a Mark-
	to-Market Currency Swap.
Initial Evolution	io-market Currency Swap.
Initial Exchange: Initial Exchange Date:	As specified by the parties
FA1 Payer Initial Exchange Amount:	As specified by the parties. As specified by the parties.
TATTayer innual Exchange Annount.	no specificu by the parties.

FA2 Payer Initial Exchange Amount:	As specified by the parties.
Interim Exchanges:	
Interim Exchange Dates:	As specified by the parties.
FA1 Payer Interim Exchange Amount:	As specified by the parties.
FA2 Payer Interim Exchange Amount:	As specified by the parties.
Final Exchanges:	
Final Exchange Date:	As specified by the parties.
FA1 Payer Final Exchange Amount:	As specified by the parties.
FA2 Payer Final Exchange Amount:	As specified by the parties.
Optional Early Termination:	The specified by the parties.
Optional Early Termination:	As specified by the parties.
Option Style:	As specified by the parties.
Optional Early Termination Date:	As specified by the parties.
Seller:	As specified by the parties. As specified by the parties if only one party can
	terminate.
Buyer:	As specified by the parties, if only one party can terminate.
Seller's Agent:	As specified by the parties, if only one party can terminate.
Business Days for Payments:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Exercise Business Days:	As specified by the parties.
Optional Early Termination Procedure for Exercise:	As specified by the parties.
Commencement Date:	As specified by the parties, if the Option Style is
	American.
Bermuda Option Exercise Dates:	As specified by the parties, if the Option Style is Bermuda.
Expiration Date:	As specified by the parties.
Expiration Time:	As specified by the parties.
Earliest Exercise Time:	As specified by the parties.
Latest Exercise Time:	As specified by the parties.
Exercise Business Day:	As specified by the parties.
Partial Exercise:	As specified by the parties, if Option Style is European.
Multiple Exercise:	As specified by the parties, if Option Style is American or Bermuda.
Minimum Notional Amount:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
Maximum Notional Amount:	As specified by the parties if Multiple Exercise is specified.
Integral Multiple:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
<b>Optional Early Termination Settlement Terms:</b>	Exercise is specified.
Cash Settlement:	As specified by the parties.
ISDA Settlement Matrix:	As specified by the parties, if Cash Settlement is
	applicable to a single currency Transaction.
ISDA Cross Currency Settlement Matrix:	As specified by the parties, if Cash Settlement is
	applicable to a cross currency Transaction whose
	currencies are listed as a "currency pair" in the Cross
Cost Coulomand Value' Th'	Currency Settlement Matrix.
Cash Settlement Valuation Time:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Valuation Date:	If Cash Settlement is applicable, as specified by the

Valuation Business Days:	If Cash Settlement is applicable, as specified by the	
	parties, directly or via the ISDA Settlement Matrix.	
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the	
	parties, directly or via the ISDA Settlement Matrix.	
Cash Settlement Payment Date Business Days	If Cash Settlement is applicable, as specified by the	
Convention:	parties, directly or via the ISDA Settlement Matrix.	
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the	
	parties from Available Cash Settlement Methods,	
	directly or via the ISDA Settlement Matrix.	
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or	
	"Cash Price—Alternate" apply, as specified by the	
	parties from Available Cash Settlement Methods,	
	directly or via the ISDA Settlement Matrix.	
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield Curve—	
	Adjusted," "Par Yield Curve—Unadjusted" or "Zero	
	Coupon Curve—Adjusted" apply, as specified by the	
	parties from Available Cash Settlement Methods,	
	directly or via the ISDA Settlement Matrix parties from	
	Available Cash Settlement Methods, directly or via the	
	ISDA Settlement Matrix.	
Cash Settlement Reference Banks:	As specified by the parties, if Settlement Rate is	
	applicable.	
Cash Settlement Reference Banks:	If Cash Settlement is applicable, as specified by the	
	parties.	
Quotation Rate:	If Cash Settlement is applicable, as specified by the	
	parties from among the Available Quotation Rates.	
Calculation Agent:	As agreed by the parties.	

# Basis Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	САТО
CHF	Swiss Franc	CHZU
CLP	Chilean Peso	CLSA
CZK	Czech Koruna	CZPR
DKK	Danish Krone	DKCO
EUR	Euro	EUTA
GBP	Sterling	GBLO
HKD	Hong Kong Dollar	НКНК
HUF	Hungarian Forint	HUBU
JPY	Japanese Yen	JPTO
MXN	New Mexican Peso	MXMC
NOK	Norwegian Krone	NOOS
NZD	New Zealand Dollar	NZAU and NZWE
PLN	Polish Zloty	PLWA
SEK	Swedish Krona	SEST
SGD	Singapore Dollar	SGSI
TRY	Turkish Lira	TRIS
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

#### Basis Available Business Day Conventions

ISDA Name	
Following	
Modified/Modified Following	
No Adjustment	
Preceding	
FRN Convention/Eurodollar Convention	

## Basis Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

### **Basis Default Effective Dates**

Currency	Default Effective Date
All Currencies Other than CAD, GBP, MXN, ZAR	Plus Two Banking Days
MXN	Plus One Banking Day
CAD, GBP, ZAR	Plus Zero

#### Basis Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective	Earliest Termination	Latest Termination
	Date	Date	Date	Date
N/A	N/A	N/A	N/A	N/A

#### **Basis Notional Amounts**

Currency	Minimum	Increment	Maximum	Default
AUD	5,000,000	100,000	N/A	N/A
CAD	25,000,000	1,000,000	N/A	N/A
CHF	5,000,000	100,000	N/A	N/A
CLP	5,000,000	100,000	N/A	N/A
CZK	5,000,000	100,000	N/A	N/A
DKK	5,000,000	100,000	N/A	N/A
EUR	5,000,000	100,000	N/A	N/A
GBP	5,000,000	100,000	N/A	N/A
HKD	5,000,000	100,000	N/A	N/A
HUF	5,000,000	100,000	N/A	N/A
JPY	5,000,000	100,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
NOK	5,000,000	100,000	N/A	N/A
NZD	5,000,000	100,000	N/A	N/A
PLN	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
SGD	5,000,000	100,000	N/A	N/A
TRY	5,000,000	100,000	N/A	N/A
USD	5,000,000	100,000	N/A	N/A

ZAR 5,000,000 100,000 N/A	N/A

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-AONIA-OIS- COMPOUND- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR- AUBBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Swap Rate- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-CDOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-CORRA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν

# Basis Floating Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-ISDAFIX-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-OIS-11:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-TOIS-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
CLP-CLICP- Bloomberg	All quoted tenors	N/A	A/360	Ν
CLP-Unidad de Fomento (UF/CLF)	All quoted tenors	N/A	A/360	Ν
CZK-PRIBOR-PRBO	All quoted tenors	N/A	A/360	Ν
DKK-CIBOR- DKNA13	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-CIBOR- DKNA13-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-CIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-CIBOR2-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
DKNA13				
DKK-CITA- DKNA14- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-DKKOIS-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURONIA- OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA- EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA- EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TMM-CDC- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP USD-Basis	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Swaps-11:00-ICAP				
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-11:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-SONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA- RONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA- SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR- HIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR- HIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HKAB	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR- HKAB-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HONIX-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-ISDA-Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-ISDA-Swap Rate-4:00	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly- Annual Swap Rate- 11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly- Annual Swap Rate-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
4:00-BGCANTOR				
HKD-Quarterly- Annual Swap Rate- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
HUF-BUBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF- Bloomberg-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF- Bloomberg-15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate-15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR- FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL- TONAR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR- ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TONA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-Unidades de Inversión (UDI)	N/A	N/A	See below	Ν
NOK-NIBOR-NIBR	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR-NIBR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-BID	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-FRA	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-NZIONA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-Swap Rate- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-Swap Rate- ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PLN-WIBOR_WIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-SIOR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
SGD-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- VWAP- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-TRYIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11- FHLBSF	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3- Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3- Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00- LON-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index- High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SOFR- COMPOUND	All quoted tenors	N/A	Prior to publication of a supplement to ISDA 2006 including USD- SOFR-COMPOUND, not applicable and thereafter, per ISDA 2006	No
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL- Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T500	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-JIBAR-SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν

## Definition of CLP-Unidad de Fomento (UF/CLF)

CLP-Unidad de Fomento (UF/CLF)	For any Reset Date, the difference between the value of the <i>unidad de</i>
	fomento (UF/CLF) as certified by the Chilean Banco Central de Chile
	for the calendar day preceding such Reset Date and the value of the
	unidad de fomento (UF/CLF) as certified by the Chilean Banco Central
	de Chile for such Reset Date.

The Calculation Agent shall convert such difference to the appropriate annualized percentage based on the terms of the Floating Amount
payable by reference to the CLP-Unidad de Fomento (UF/CLF).
If for any Reset Date there is no published value of the unidad de
fomento (UF/CLF) as certified by the Chilean Banco Central de Chile,
the Calculation Agent shall determine the CLP-Unidad de Fomento
(UF/CLF) for such day.

#### Definition of MXN-Unidades de Inversión (UDI)

MXN-Unidades de Inversión (UDI)	For any Reset Date, the difference between the value of the <i>unidad de</i>
	inversión (UDI) as published by the Mexican Banco de México for the
	calendar day preceding such Reset Date and the value of the <i>unidad de</i>
	inversión (UDI) as published by the Mexican Banco de México for
	such Reset Date.
	The Calculation Agent shall convert such difference to the appropriate
	annualized percentage based on the terms of the Floating Amount
	payable by reference to the CLP MXN-Unidades de Inversión (UDI).
	If for any Reset Date there is no published value of the MXN-
	Unidades de Inversión (UDI) as certified by the Mexican Banco de
	México, the Calculation Agent shall determine the CLP MXN-
	Unidades de Inversión (UDI) for such day.

Basis Requirements and Defaults (Excluding Optional Early Termination and Mandatory Early Termination)

Variable	Requirement	Default
Effective Date Business Day		No Adjustment
Convention:		
Termination Date Business Day		No Adjustment
Convention:		
Period End Dates:		Payment Dates
Payment Date Business Day		Modified Following
Convention:		
Linear Interpolation:		Applicable only to long or short stub periods
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation:		longer than the actual Calculation
		Period length
Compounding:		Inapplicable
Compounding Business Day	Same as Business Day Convention	
Convention:	for Period End Dates	
Method of Averaging:	Weighted Average or Unweighted Average	Unweighted Average
Compounding Method:	Straight Compounding, Flat Compounding, Spread Exclusive Compounding	
ISDA MTM Matrix		Applicable (to Mark-to-Market Cross Currency Swaps)
Initial Exchange Date:		Effective Date
Initial Exchange Date Business Day		Following
Convention:		
Interim Exchange Date Business		Modified Following
Day Convention:		
Final Exchange Date:		Termination Date

Final Exchange Date Business Day	Modified Following
Convention:	

#### Definition of USD-SOFR-COMPOUND

From and after the date on which ISDA publishes a supplement to ISDA 2006 containing a definition of USD-SOFR-COMPOUND, per ISDA 2006.

#### Prior to such date:

"USD-SOFR-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is SOFR). Upon the occurrence of a USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the rate (inclusive of any spreads or adjustments) formally designated, nominated or recommended as the replacement for SOFR by the Federal Reserve Board or a committee officially endorsed or convened by the Federal Reserve Board for purposes of designating, nominating or recommending a replacement for SOFR (which rate may be produced by the Federal Reserve Bank of New York or another administrator). If no such rate is formally designated, nominated or recommended within one U.S. Government Securities Business Day of the USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to OBFR. If at the time of the USD-SOFR-COMPOUND Index Cessation Event, publication of OBFR has been permanently or indefinitely discontinued, it has been publicly announced that OBFR will be permanently or indefinitely discontinued as of a specific date or there has been a public statement by a regulator or other official sector entity prohibiting the use of OBFR (which statement applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions), then the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the FOMC Target Rate.

"USD-SOFR-COMPOUND" will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a):

$$\left[\prod_{i=1}^{d_{o}} \left(1 + \frac{\text{SOFR}_{i} \times n_{i}}{360}\right) - 1\right] \times \frac{360}{d}$$

where:

" $d_0$ ", for any Calculation Period, is the number of U.S. Government Securities Business Days in the relevant Calculation Period;

"i" is a series of whole numbers from one to  $d_0$ , each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant Calculation Period;

"SOFR" is the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website;

"SOFR<sub>i</sub>", for any day "i" in the relevant Calculation Period, is a reference rate equal to SOFR in respect of that day as published on or about 8:00 a.m., New York City time, on the U.S. Government Securities Business Day immediately following that day "i". If, by 5:00 p.m., New York City time, on the U.S. Government Securities Business Day immediately following any day "i", SOFR in respect of such day "i" has not been published and a USD-SOFR-COMPOUND Index Cessation Event has not occurred, then SOFR<sub>i</sub> for that day "i" will be SOFR as

published in respect of the first preceding U.S. Government Securities Business Day for which SOFR was published on the Federal Reserve's Website;

"ni" is the number of calendar days in the relevant Calculation Period on which the rate is SOFRi;

"d" is the number of calendar days in the relevant Calculation Period;

"USD-SOFR-COMPOUND Index Cessation Event" means the occurrence of one or more of the following events:

- (a) a public statement by the Federal Reserve Bank of New York (or a successor administrator of SOFR) announcing that it has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR;
- (b) the publication of information which reasonably confirms that the Federal Reserve Bank of New York (or a successor administrator of SOFR) has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR; or
- (c) a public statement by a regulator or other official sector entity prohibiting the use of SOFR that applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions;

"USD-SOFR-COMPOUND Index Cessation Effective Date" means, in respect of a USD-SOFR-COMPOUND Index Cessation Event, the date on which the Federal Reserve Bank of New York (or a successor administrator of SOFR) ceases to publish SOFR or the date as of which SOFR may no longer be used; and

"OBFR" is the daily Overnight Bank Funding Rate as provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website.

"FOMC Target Rate" is the short-term interest rate target set by the Federal Open Markets Committee and published on the Federal Reserve's Website or, if the Federal Open Markets Committee does not target a single rate, the midpoint of the short-term interest rate target range set by the Federal Open Markets Committee and published on the Federal Reserve's Website (calculated as the arithmetic average of the upper bound of the target range and the lower bound of the target range, rounded, if necessary, in accordance with the method set forth in Section 8.1(c))

"Federal Reserve's Website" means the website of the Board of Governors of the Federal Reserve System at <u>http://www.federalreserve.gov</u>, or any Successor Source.

Setting	Requirement	Default
Optional Early Termination:		Inapplicable
Mandatory Early Termination:		Inapplicable
Option Style:	American, Bermuda, European	
Cash Settlement:	Required for Mandatory Early Termination	Applicable (i.e., Transaction is <b>not</b> "torn up for no value")
Optional Early Termination Date:		Cash Settlement Payment Date
Optional Early Termination Date Business Day Convention:		Following
Mandatory Early Termination Date Business Day Convention:		Modified Following

#### Basis Requirements and Defaults (Optional Early Termination and Mandatory Early Termination)

## Basis Requirements and Defaults (Optional Early Termination—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day:		Banking Day for cash Settlement
		Currency (TARGET Settlement Day
		for EUR)
Latest Exercise Time:	On Expiration Date, the Expiration	Other than Expiration Date, the
	Time	Expiration Time

## Basis Requirements and Defaults (Cash Settlement)

Setting	Requirement/Choices	Default
Cash Settlement Amount:		
ISDA Cross Currency Settlement Matrix:		Applicable, if cross currency swap with currency pair included in Matrix
ISDA Settlement Matrix:		Applicable, if single currency swap with Currency included in Matrix
Cash Settlement Valuation Time:		
Cash Settlement Valuation Date:		Two Valuation Business Days before Mandatory/Optional Early Termination Date <b>but</b> one Valuation Business Day before Mandatory/Optional Early Termination Date for MXN and same day for CAD, GBP or DKK with Floating Rate Option of "DKK- CIBOR-DKNA13" or "DKK- CIBOR-DKNA13-Bloomberg"
Valuation Business Day:		Banking Days in locations per the Business Day Location Table, plus additional days required by for fixings under the Floating Rate Option(s)
Cash Settlement Payment Date		Following
Business Day Convention: Cash Settlement Method:	Cash Price Cash Price—Alternate Method Collateralized Cash Price Par Yield Curve—Adjusted Par Yield Curve—Unadjusted Zero Coupon Yield—Adjusted	
Cash Settlement Currency:		For single currency, same as Notional Amount, otherwise as specified in ISDA Master Agreement, or otherwise same as Notional Amount for Fixed Amount
Settlement Rate:	ISDA Source/Other Price Source/Reference Banks	

Cash Settlement Reference Banks:		Fallbacks per ISDA 2006 Definitions
Quotation Rate:	bid ask mid Exercising Party Pays (Optional Early Termination Only)	

# **Basis Swaps – CME Cleared**

Summary:	This covers single-currency floating-for-floating ("basis") swaps cleared by Chicago Mercantile
	Exchange Inc. ("CME").
Limitations on Available Selections and Default	The terms under which a Basis Swap/CME Cleared may
Settings:	be traded are as specified in these terms and conditions
~	and which incorporate the CME Rulebook, in particular
	Chapters 900 and 901 (and any successor provisions)
	and the CME Cleared IRS Product Scope (or any
	successor).
	By electing to trade a Basis Swap/CME Cleared,
	participants are representing that they are familiar
	with the CME Rulebook and the limitations on
	transaction terms contained in it.
Incorporated Standards:	This contract description incorporates by reference the
	CME Rulebook as in effect from time to time.
	The CME Rulebook itself may incorporate certain
	additional standards, such as the 2006 ISDA Definitions.
	Be aware that the timing of effectiveness of amondments or supplements to the ISDA standards
	amendments or supplements to the ISDA standards may vary between bilateral and CME contracts,
	since the CME may reserve the right to select when
	and how such changes become effective.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product(s):	Basis
Further Limitations:	Must comply with CME Clearing Requirements.
Terms:	
Definition Set:	The definition set (e.g., ISDA 2000/ISDA2006) elected
	by, or otherwise binding on, the parties in accordance
	with the CME Rulebook.
Effective Date:	As per the CME Rulebook.
Notional Amount:	An amount in Currency determined by the parties
	subject to limitations in the CME Rulebook.
	This may vary from period to period to the extent
	permitted by the CME Rulebook.
	The CME Rulebook may limit the Currencies and
	Floating Rate Options for which variable notionals are
Curronau	permitted.
Currency:	One of the currencies permitted for the relevant transaction type per the CME Rulebook.
Business Days:	As per the CME Rulebook, which may require certain
Dusiness Days.	Business Days be applicable on a per Currency or
	Floating Rate Option Basis and may otherwise limit the
	available Business Day locations which can be elected.
Business Day Convention:	As per the CME Rulebook.
Trade Date:	As per the CME Rulebook.
Termination Date:	As agreed by the parties, subject to any minimum or
	maximum tenor in the CME Rulebook.
Termination Date Business Day Convention:	As per the CME Rulebook, and thus subject to

	limitations based on other terms of the transaction.
Stub Periods:	Permitted to the extent allowed under the CME
	Rulebook.
Floating Rate Payer 1 Floating Rate Payer Payment	As per the CME Rulebook.
Dates:	
Floating Rate Payer 1 Floating Amount:	As per the CME Rulebook.
Floating Rate Payer 1 Floating Rate Option:	As determined by the parties, subject to the CME
	Rulebook, which may provide a more limited list of
	available options for a Currency than does the Definition
	Set.
Floating Rate Payer 1 Designated Maturity:	As per the CME Rulebook, which may provide a more
	limited set of Designated Maturities than does the
	related rate source page.
Floating Rate Payer 1 Spread:	Subject to any minimum or maximum rate and per-
	period variability permitted by the CME Rulebook.
Floating Rate Payer 1 Reset Dates:	As the per CME Rulebook.
Floating Rate Payer 1 Floating Rate Daycount Fraction:	As per the CME Rulebook.
Floating Rate Payer 1 Compounding:	As per the CME Rulebook.
Floating Rate Payer 1 Averaging Method:	As per the CME Rulebook.
Floating Rate Payer 1 Initial Floating Rate:	As per the CME Rulebook.
Floating Rate Payer 2 Floating Rate Payer Payment	As per the CME Rulebook.
Dates:	
Floating Rate Payer 2 Floating Amount:	As per the CME Rulebook.
Floating Rate Payer 2 Floating Rate Option:	As determined by the parties, subject to the CME
	Rulebook, which may provide a more limited list of
	available options for a Currency than does the Definition
	Set.
Floating Rate Payer 2 Designated Maturity:	As per the CME Rulebook, which may provide a more
	limited set of Designated Maturities than does the
	related rate source page.
Floating Rate Payer 2 Spread:	Subject to any minimum or maximum rate and per-
	period variability permitted by the CME Rulebook.
Floating Rate Payer 2 Reset Dates:	As the per CME Rulebook.
Floating Rate Payer 2 Floating Rate Daycount Fraction:	As per the CME Rulebook.
Floating Rate Payer 2 Compounding:	As per the CME Rulebook.
Floating Rate Payer 2 Averaging Method	As per the CME Rulebook.
Floating Rate Payer 2 Initial Floating Rate	As per the CME Rulebook.
Floating Rate 1 Floating Rate Payer:	As determined by the parties.
Floating Rate 2 Floating Rate Payer	As determined by the parties.
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitation in the CME Rulebook.
Additional Payment/Fees:	As determined by the parties, subject to limitation in the
····· <b>·</b>	CME Rulebook.
Payment Date for Additional Payment/Fees	As determined by the parties, subject to limitation in the
•	CME Rulebook.

# **Basis Swaps – LCH Cleared**

Summary:	This covers single-currency floating-for-floating ("basis") cleared by LCH.Clearnet ("LCH").
Limitations on Available Selections and Default Settings:	<ul> <li>The terms under which a Basis Swap/LCH Cleared may be traded are as specified in these terms and conditions and which incorporate the LCH Rulebook, in particular Schedule 4A (or any successor provisions).</li> <li>By electing to trade a Basis Swap/LCH Cleared, participants are representing that they are familiar with the LCH Rulebook and the limitations on transaction terms contained in it.</li> </ul>
Incorporated Standards:	This contract description incorporates by reference the LCH Rulebook as in effect from time to time. The LCH Rulebook itself may incorporate certain additional standards, such as the 2000 ISDA Definitions and 2006 ISDA Definitions. Be aware that the timing of effectiveness of amendments or supplements to the ISDA standards may vary between bilateral and LCH contracts, since the LCH may reserve the right to select when and how such changes become effective.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Basis
Further Limitations:	Must comply with LCH Clearing Requirements.
Terms:	
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2000/ISDA2006) elected by, or otherwise binding on, the parties in accordance with the LCH Rulebook.
Notional Amount:	An amount in Currency determined by the parties subject to limitations in the LCH Rulebook. This may vary from period to period to the extent permitted by the LCH Rulebook. The LCH Rulebook may limit the Currencies and Floating Rate Options for which variable notionals are permitted.
Currency:	One of the currencies permitted for the relevant transaction type per the LCH Rulebook.
Trade Date:	As per the LCH Rulebook.
Effective Date:	As per the LCH Rulebook.
Termination Date:	As agreed by parties, subject to any minimum or maximum tenor in the LCH Rulebook.
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook.
Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook.
Payment Date for Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook, which may limit the earliest or latest day on which such fees may be paid based on Currency
	or other factors.

	Business Days be applicable on a per Currency or
	Floating Rate Option Basis and may otherwise limit the
	available Business Day locations which can be elected.
Business Day Convention:	As per the LCH Rulebook.
Stub Periods:	Permitted to the extent allowed under the LCH
	Rulebook.
Floating Rate Payer 1:	As determined by the parties.
Floating Rate Payer 1 Payment Dates:	As per the LCH Rulebook.
Floating Rate Payer 1 Compounding Dates:	As per the LCH Rulebook.
Floating Rate Payer 1 Floating Rate Option:	As determined by the parties, subject to LCH Rulebook,
	which may provide a more limited list of available
	options for a Currency than does the Definition Set.
Floating Rate Payer 1 Designated Maturity:	As per the LCH Rulebook, which may provide a more
	limited set of Designated Maturities than does the
	related rate source page.
Floating Rate Payer 1 Spread:	Subject to any minimum or maximum rate and per-
	period variability permitted by the LCH Rulebook.
Floating Rate Payer 1 Reset Dates:	As the per LCH Rulebook.
Floating Rate Payer 1 Floating Rate Daycount Fraction:	As per the LCH Rulebook.
Floating Rate Payer 2:	As determined by the parties.
Floating Rate Payer 2 Payment Dates:	As per the LCH Rulebook.
Floating Rate Payer 2 Compounding Dates:	As per the LCH Rulebook.
Floating Rate Payer 2 Floating Rate Option:	As determined by the parties, subject to LCH Rulebook,
	which may provide a more limited list of available
	options than are available for a Currency than does the
	Definition Set.
Floating Rate Payer 2 Designated Maturity:	As per the LCH Rulebook, which may provide a more
	limited set of Designated Maturities than does the
	related rate source page.
Floating Rate Payer 2 Spread:	Subject to any minimum or maximum rate and per-
	period variability permitted by the LCH Rulebook.
Floating Rate Payer 2 Reset Dates:	As the per LCH Rulebook.
Floating Rate Payer 2 Floating Rate Daycount Fraction:	As per the LCH Rulebook.
Negative Interest Rates:	As per the LCH Rulebook, which may require use of a
	single method.
Withholding and Tax:	As per the LCH Rulebook.
Governing Law:	As per the LCH Rulebook, which may dictate the law
	applicable to the Transaction.

Summary:	This covers BRL CDI Deliverable and Non-Deliverable
Stammer y.	Interest Rate Swap Contracts and Physically-Settled
	Swaptions Thereon (the "Contracts").
	Non-Deliverable Contracts are paid in USD, and
	Deliverable Contracts are paid in BRL.
Limitations on Available Selections and Default	The terms under which the Contracts may be traded are
Settings:	as specified in these terms and conditions and in the
	attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	For Business Days, the defaults shall be the locations
	specified. The parties may add additional locations from the
	Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made. For these
	purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which
	the parties will transact. These are shown as "Default"
	and will apply unless the parties vary them.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions
	(b) ISDA OTC Taxonomies
	(c) FpML Location Codes (d) the December ded EMTA ISDA Market Dreatice for
	(d) the Recommended EMTA-ISDA Market Practice for RBL CDL Non Deliverable Interast Rate Super-
	BRL CDI Non-Deliverable Interest Rate Swap Transactions (Amended March 13, 2009) ("BRL CDI
	Best Practices")
	(e) the EMTA BRL/USD NDF Template dated May 17,
	2006 (the "NDF Template")
	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Exotic
Further Limitations:	None
Terms:	
Effective Date ("offective Date")	The date specified by the parties, adjusted in accordance
Effective Date ("effectiveDate"):	
Effective Date ("effectiveDate"):	with any applicable Business Day Convention.
Effective Date ("effectiveDate"):	with any applicable Business Day Convention. The parties may express the unadjusted Effective Date as
Effective Date ("effectiveDate"):	with any applicable Business Day Convention. The parties may express the unadjusted Effective Date as a number of Business Days or Banking Days from the
Effective Date ( effectiveDate ): Effective Date Business Days:	with any applicable Business Day Convention. The parties may express the unadjusted Effective Date as

Effective Date Business Day Convention:	As specified by the parties from among the Available
Encenve Date Business Day Convention.	Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Termination
	Date as a number of days, months or years from the
	Effective Date ("relativeTerminationDate").
Termination Date Business Days:	In the case of a Non-Deliverable Contract, USNY and
	the BR Business Day selected by the parties, unless there
	is an Unscheduled Holiday (as defined in the NDF
	Template) following the Trade Date, in which case
	USNY only.
	In the case of a Deliverable Contract, the BR Business
	Day selected by the parties.
Termination Date Business Day Convention:	Following
Fx Factor:	In the case of a Non-Deliverable Contract, rate
	determined in accordance with the NDF Template,
	treating the Business Day preceding the day of
	calculation of the relevant Fixed Amount or Floating
	Amount as the "Valuation Date" thereunder. (Under the
	NDF Template, this will result in use of the BRL PTAX
	(BRL09) rate in the first instance.)
	In the case of a Deliverable Contract, 1.0.
<b>Fixed Amount:</b> Fixed Rate Payer ("payerPartyReference"):	As specified by the parties
Notional Amount ("notional Amount"):	As specified by the parties. The Trade Date Present Value Notional Amount
Notional Amount ( notional Amount ).	specified by the parties.
	If the parties do not specify a Notional Amount or a
	Trade Date Present Value Notional Amount but specify
	a Termination Date Future Value Notional Amount, then
	the Notional Amount will be the Trade Date present
	value of the Termination Date Future Value Notional
	Amount discounted at the Fixed Rate.
Future Value Notional Amount:	An amount in BRL as specified by the parties (or
	determined based on the Trade Date Present Value
	Notional Amount specified by them), subject to the
	Minimum Notional Amount and Increment specified
	below.
Trade Date Present Value Notional Amount:	An amount in BRL as specified by the parties; such
	amount shall be subject to the Minimum Notional
	Amount and Increment implied by the Future Value
	Notional Amount.
Fixed Rate:	As specified by the parties.
Fixed Amount:	Notwithstanding anything to the contrary contained in
	the 2006 ISDA Definitions, the Fixed Amount shall
	equal:
	Notional Amount × $(1 + Fixed Rate)^{Calculation Days/252}$
Calculation Days:	As defined in the BRL CDI Best Practices.
Fixed Rate Payment Dates ("unadjustedPaymentDate"):	The Termination Date.
Day Count Fraction:	1/1
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	Same as the Fixed Rate Payer Payment Amount.
Floating Amount:	Notwithstanding anything to the contrary contained in

	the 2006 ISDA Definitions, the Floating Amount shall
	equal:
	Notional Amount × Floating Rate
Payment Dates ("unadjustedPaymentDate"):	The Termination Date.
Floating Rate:	Notwithstanding anything to the contrary contained in the 2006 ISDA Definitions, the Floating Amount shall equal:
	FX Factor $\times \prod_{j=1}^{N} (1 + Relevant Rate_j)^{1/252}$
	Where:
	N=number of Reset Dates in the Calculation Period
	j=a particular Reset Date
	<i>Relevant Rate</i> =the Relevant Rate for instance <i>j</i> of Reset
	Date
Relevant Rate:	CDI-Rate (as defined in the attachment).
Designated Maturity ('indexTenor"):	As specified by the parties from among the available
	tenors.
Spread:	Zero
Day Count Fraction:	1/1
Reset Dates ("resetDate"):	Each Scheduled Reset Date (as defined in the BRL CDI
	Best Practices).
Reset Dates Business Days:	As specified by the parties from among the Available
	BR Business Days.
Floating Rate Payment Dates:	The Termination Date.
Calculation Agent:	As agreed by the parties.
Swaption Terms:	
Option Style:	European
Seller:	As specified by the parties.
Buyer:	As specified by the parties.
Seller's Agent:	As specified by the parties.
Premium:	In the case of a Non-Deliverable Contract, an amount in
	USD specified by the parties.
	In the case of a Deliverable Contract, an amount in USD
	specified by the parties.
Premium Payment Date:	As specified by the parties.
Business Day Convention for Premium Payment Dates:	Following
Business Days for Payments:	In the case of a Non-Deliverable Contract, USNY and
	the BR Business Day selected by the parties, unless there
	is an Unscheduled Holiday (as defined in the NDF
	Template) following the Trade Date, in which case
	USNY only.
	In the case of a Deliverable Contract, the BR Business
Energia Ducines Deces	Day selected by the parties.
Exercise Business Days:	As specified by the parties from among the BR Business
Swantian Procedure for Evansion	Days.
Swaption Procedure for Exercise: General:	The parties may enter into swaptions with respect to
Ochiciai.	which a BRL CDI Swap is the Underlying Swap
	Transaction.
Expiration Date:	As specified by the parties.
Expiration Date: Expiration Time:	As specified by the parties.
Partial Exercise:	As specified by the parties.
Minimum Notional Amount:	As specified by the parties. As specified by the parties and expressed as Termination
minimum nouonai Amount:	As specified by the parties and expressed as Termination

	Date Future Value Notional Amount.
Maximum Notional Amount:	As specified by the parties and expressed as Termination
	Date Future Value Notional Amount.
Integral Multiple:	As specified by the parties and expressed as Termination
	Date Future Value Notional Amount.
Automatic Exercise:	As specified by the parties.
Threshold:	As specified by the parties if Automatic Exercise is
	applicable.
Fallback Exercise:	As specified by the parties (if required).
Swaption Settlement Terms:	
Physical Settlement:	Applicable

#### BRL CDI Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY
BRL	Brazilian Reai	Any of BR{SP, RJ, BR} and not otherwise declared a financial market holiday by the BM&F

#### BRL CDI Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

#### BRL CDI Floating Rate Options

BRL-CDI-CETIP:	For any Reset Date, the Overnight Brazilian Interbank Deposit
	Rate Annualized, known as the average ("Media") of the
	DIOVER- EXTRA Group as published by CETIP (Câmara de
	Custódia e Liquidação) (the "Overnight CDI Rate") for such
	date; provided that (i) such rate is published not later than 12:00
	p.m. on the Brazil Business Day next following such Reset Date
	and (ii) any adjustments made by CETIP to such rate at any time
	later than the end of the business day on such Reset Date shall
	not be taken into account.
	If for any Reset Date there is no published Overnight CDI Rate
	(including as a result of the proviso above), CDI for the relevant
	Reset Date will be the overnight deposit rate published for such
	date by the BM&F in accordance with its rules (see
	http://www.bmf.com.br/portal/pages/boletim1/bd_manual/indica
	doreFinanceiros1.asp, or any successor page). If the BM&F
	does not publish such a rate for such date, CDI for the relevant
	Reset Date shall be determined jointly by the parties. If the
	parties do not agree on a determination of such rate within one
	Brazil Business Day following the relevant Reset Date, CDI
	shall be determined through a CDI Reference Dealer Poll as
	described herein. If CDI for a Reset Date is not so determined
	described noteni. If CDT for a Reset Date is not so determined

	by a CDI Reference Dealer Poll, BRL-CDI-Reference Dealers shall apply.
BRL-CDI-Reference Dealers:	If applicable for a Reset Date as set forth above, the Calculation Agent shall conduct up to four dealer polls commencing on the Brazil Business Day following the relevant Reset Date, in each case by requesting each of the CDI Reference Dealers to provide a quotation of the CDI. If at least four such quotations are obtained from CDI Reference Dealers in any such poll, the highest and lowest quotations will be disregarded and CDI for the relevant Reset Date will equal the arithmetic mean of the remaining quotations. If fewer than four such quotations are obtained from a poll, the Calculation Agent shall conduct additional such polls until four such quotations are obtained in any poll; provided that the Calculation Agent shall not conduct more than four polls in the aggregate (with not more than two polls on any day and with such polls conducted over not more than two Brazil Business Days). If four quotations are not obtained from any of such four polls, CDI shall CDI shall not be determined by a CDI Reference Dealer Poll.
CDI Reference Dealers:	At least six and not more than eight leading onshore dealers in the CDI market selected by the Calculation Agent.

#### BRL CDI Notionals

Currency	Minimum	Increment	Maximum	Default
	(expressed as	(expressed as		
	Termination Date	Termination Date		
	Future Value	Future Value		
	Notional Amount)	Notional Amount)		
BRL (Termination	BRL 5,000,000	BRL 5,000,000	N/A	N/A
Date Future Value				
Notional Amount)				
BRL (Trade Date	As implied by Termination Date Future Value Notional Amount			
Present Value				
Notional Amount)				
USD	As implied by BRL Termination Date Future Value Notional Amount			

## **Bullion Options**

Summary:	This covers uncleared bullion options ("Bullion Options").
Limitations on Available Selections and Default	The terms under which Bullion Options may be traded
Settings:	are shown below and in the attached tables.
Incorporated Standards:	This contract description incorporates by reference the
nicor por accu Standar us.	following industry standard documentation and
	standards:
	2000 ISDA Definitions
	2005 ISDA Commodity Derivatives Definitions
	("Commodity Definitions"), including Sub-Annex B
	thereto.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Commodity
ISDA OTC Base Product:	Metals
ISDA OTC Sub-Product:	Precious
ISDA OTC Transaction type:	Option
ISDA OTC Settlement type:	Cash or Physical
Further Limitations:	None
Terms:	
Trade Date:	As agreed by the parties.
Bullion:	As specified by the parties from among the Available
	Bullion.
Number of Ounces:	As specified by the parties. For any type of Bullion, the
	meaning of "Ounce" will be as specified for that Bullion
	in the list of Available Bullion unless otherwise agreed
	by the parties.
Bullion Option Style:	As specified by the parties from among the Available
Dullion Option Type	Bullion Option Styles.As specified by the parties from among the Available
Bullion Option Type:	Bullion Option Types.
Bullion Option Seller:	As specified by the parties.
Bullion Option Buyer:	As specified by the parties.
Bullion Strike Price:	As specified by the parties as a number of units of the
buillon suike trice.	one of the Available Currencies.
Bullion Premium:	As specified by the parties as a number of units of the
	one of the Available Currencies.
Bullion Premium Payment Date:	As specified by the parties.
Bullion Premium Payment Date Business Days	Per the Available Currencies, plus such additional
	Business Days as the parties specify.
Bullion Premium Payment Date Business Day	As specified by the parties from among the Available
Convention:	Business Day Conventions or otherwise per the
	Commodity Definitions.
Bullion Business Day:	Shall have the meaning specified in the Commodity
	Definitions, save that the reference to "New York"
	therein shall be deemed to be a reference to the relevant
	financial center for the Applicable Currency in which the
	Bullion Strike Price is denominated.
Method of Averaging:	For Asian Options, as specified by the parties or
	otherwise per the Commodity Definitions.
Procedure for Exercise:	

Bullion Exercise Period:	For an American Style Bullion Option, the period of
	days and the times on such days specified by the parties.
	For any other Bullion Option Style, the times on the
	Expiration Date or Potential Exercise Date specified by
	the parties.
Bullion Potential Exercise Dates:	For a Bermuda Style Bullion Option, the days specified
	by the parties.
Bullion Expiration Date:	As specified by the parties.
Bullion Expiration Time:	For a European Style Bullion Option, as specified by the
	parties.
Bullion Settlement Date:	In accordance with Section 10.4(b)(xvii) of the
	Commodity Definitions, unless specified by the parties.
Seller's Notice Information:	As specified by the Seller.
Automatic Exercise:	Applicable, unless otherwise specified by the parties.
In-the-Moniness for Automatic Exercise:	In the case of a Bullion Option for which Automatic
	Exercise is, or is deemed to be, applicable, and to which
	Settlement by Delivery is applicable, one percent of the
	Bullion Strike Price (as specified in Section
	10.4(c)(ii)(B)(x) of the Commodity Definitions) or such
	other amount as specified by the parties.
Price Source for Automatic Exercise:	In the case of a Bullion Option for which Automatic
	Exercise is, or is deemed to be, applicable, and to which
	Settlement by Delivery is applicable, the Seller's bid or
	offer price (as specified in Section 10.4(c)(ii)(B) of the
	Commodity Definitions) unless otherwise specified by
	the parties.
Written Confirmation:	As specified by the parties.
Settlement:	As specified by the parties from among the Available
	Settlement Types; provided, however, that Cash
	Settlement will only be available for Available
	Currencies for which it is specified as such.
Additional Provisions for Tax:	None, unless specified by the parties in accordance with Section 10.11 of the Commodity Definitions.
Market Disruption:	Section 10.11 of the Commonly Demittons.
Market Disruption Events:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Additional Market Disruption Events:	As specified by the parties.
Disruption Fallbacks:	Unless otherwise specified by the parties, per the
Distuption Funducks.	Commodity Definitions.
Fallback Reference Price:	None, unless specified by the parties.
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the
filaminani Days of Distaption.	Commodity Definitions.
Provisions Relating to Cash Settlement:	
Commodity Reference Price:	As specified by the parties from among the Available
	Commodity Reference Price.
Bullion Transaction Settlement Date:	As specified by the parties.
Provisions Relating to Settlement by Delivery:	
Delivery Location:	Per the Delivery Loco specified in the Available Bullion
	below.
	Cancellation and Payment unless the parties agree that
Consequences of Bullion Settlement Disruption Events:	
Consequences of Bullion Settlement Disruption Events:	
-	Negotiation is applicable.
Consequences of Bullion Settlement Disruption Events: Miscellaneous: Discharge and Termination:	Negotiation is applicable.

Novation Netting:	For Bullion Options subject to Settlement by Delivery and is not an Allocated Transaction, as agreed by the parties on a "Type of Obligation" or "Matched Pair" basis.
Calculation Agent:	As agreed by the parties.

#### Bullion Option Available Currencies and Required Business Days

Three Letter Currency Code	Currency Name (ISDA)	Basic Business Day	Available Settlement
(ISDA/ISO)		Locations For Currency	Туре
		(FpML Codes)	
AUD	Australian Dollar	AUSY	Physical Only
CHF	Swiss Franc	CHZU	Physical Only
EUR	Euro	EUTA	Cash or Physical
GBP	Sterling	GBLO	Cash or Physical
JPY	Japanese Yen	JATO	Physical Only
USD	United States Dollars	USNY	Cash or Physical

#### Bullion Options Available Bullion Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

#### Bullion Option Available Bullion Option Style

ISDA Name
American
European
Bermuda

#### Bullion Option Available Bullion Option Type

ISDA Name
Bullion Put Option
Bullion Call Option
Bermuda

#### Bullion Options Available Bullion

Metal	Ounce	Delivery Loco/Rules
Gold	Fine troy ounce	London/LBMA
Palladium	Troy ounce	Zurich/LPPM or London/LPPM
Platinum	Troy ounce	Zurich/LPPM or London/LPPM
Silver	Troy ounce	London/LBMA

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

ISDA Definition	
GOLD-A.M. FIX	
GOLD-P.M. FIX	
PALLADIUM-A.M. FIX	

PALLADIUM-P.M. FIX
PLATINUM-A.M. FIX
PLATINUM-P.M. FIX
SILVER-FIX

For any Available Currency other than USD and any Bullion Option to which Cash Settlement is applicable, the Commodity Reference Price shall be per Sub-Annex A, save that the reference to U.S. Dollars shall be replaced by a reference to the relevant Available Currency.

## CDS - ABX Indices (Broad Based) Contracts

Summary:	This covers credit default swaps on broad-based ABX indices ("CDS – ABX Indices (Broad Based) Contracts").
Limitations on Available Selections and Default Settings:	The terms under which CDS – ABX Indices (Broad Based) Contracts may be traded are shown below or in the attached table(s) or the Relevant Annexes promulgated by the index sponsor and referenced below or in the attached table(s), as such Relevant Annexes may be amended from time to time by the Index Sponsor. NO ABX INDEX WILL BE TRADED ON THE SEF ONCE IT HAS CEASED TO BE A BROAD BASED INDEX UNDER CFTC REGULATIONS.
Incorporated Standards:	<ul> <li>This contract description incorporates by reference the following industry standard documentation and standards:</li> <li>(a) 2003 ISDA Credit Derivatives Definitions, as published by the International Swaps and Derivatives Association, Inc. (the "Credit Derivatives Definitions"), NOT including supplements thereto; and</li> <li>(b) the ABX Transactions Standard Terms Supplement, as published by CDS IndexCo LLC on July 19, 2006 (the "ABX Standard Terms").</li> </ul>
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Credit
ISDA OTC Base Product:	Index
ISDA OTC Sub-Product:	ABX
ISDA OTC Transaction type:	ABX.HE
Further Limitations:	None
Terms:	
Index:	The ABX Index selected by the parties from among the Available ABX Indices. <b>NO ABX INDEX WILL BE TRADED ON THE SEF</b> <b>ONCE IT HAS CEASED TO BE A BROAD BASED</b> <b>INDEX UNDER CFTC REGULATIONS.</b>
Annex Date:	As specified for the applicable Index on the list of Available ABX Indices.
Trade Date:	As agreed by the parties.
Effective Date:	The Trade Date (unless otherwise specified by the parties).
Scheduled Termination Date:	The "Legal Final Maturity Date of the Index" specified in the Relevant Annex.
Floating Rate Payer:	As specified by the parties.
Fixed Rate Payer:	As specified by the parties.
Aggregate Floating Rate Payer Calculation Amount:	An amount is USD specified by the parties.
Fixed Rate:	A number of basis points equal to the "Applicable Coupon" as specified for the applicable Index on the Relevant Annex.
Initial Payment Payer:	As selected by the parties.
Initial Payment Amount:	As specified by the parties. Notwithstanding anything to

the contrary contained in the ABX Standard Terms, the Initial Payment Amount shall be paid by the Initial Payment Payer on the date that is three Business Days following the Trade Date, unless otherwise specified by the parties.

Index	Relevant Annex
ABX.HE.A.06-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.A.06-1.pdf
ABX.HE.AA.06-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AA.06-1.pdf
ABX.HE.AAA.06-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AAA.06-1.pdf
ABX.HE.AA.06-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AA.06-2.pdf
ABX.HE.AAA.06-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AAA.06-2.pdf
ABX.HE.AAA.07-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AAA.07-1.pdf
ABX.HE.AAA.07-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AAA.07-2.pdf
ABX.HE.PENAAA.06-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.PENAAA.06-2.pdf
ABX.HE.PENAAA.07-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.PENAAA.07-1.pdf
ABX.HE.PENAAA.07-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.PENAAA.07-2.pdf

# NO ABX INDEX WILL BE TRADED ON THE SEF ONCE IT HAS CEASED TO BE A BROAD BASED INDEX UNDER CFTC REGULATIONS.

## CDS Index Contract – Emerging Markets Swaps and Swaptions

Summary:	This covers "CDS Index Contract – Emerging Markets
Summary.	Swaps and Swaptions" contracts $- i.e.$ , an agreement to
	buy or sell protection on a broad-based basket of
	emerging markets sovereign entities.
Index:	CDX.EM: Series 12 through current, so long as such
	Index is not a narrow-based Index.
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a
0	premium to the seller in case of a credit event occurring.
	Credit events include Bankruptcy and Failure to Pay.
	Sell = Sell Protection, the seller of protection receives
	the premium payments from the protection buyer. The
	Seller owns the credit risk of the instrument.
	Investment Grade indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of 500
	bps and exchanged on a quarterly basis.
Swap Tenor:	As agreed by the parties, subject to Applicable Law.
Effective Date:	The date on which parties begin calculating accrued
	obligations such as fixed payments. Also known as the
	start date of the swap.
Maturity Date:	The final date on which the obligations no longer accrue
	and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF
	Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent payment - Payments related to credit event
	settlement will be determined pursuant to the 2009
	ISDA Credit Derivatives Determination Committees and
	Auction Settlement Supplement ( <i>i.e.</i> , the Big Bang and
	Little Bang Protocols).
	Fixed Quarterly cash payments - reflected in basis points
	and paid by the protection buyer to the protection seller.
	Upfront payment - The upfront payment is a portion of
	the payments, expressed in percentage points of the
	notional, which is present valued and paid immediately to the seller.
Swaptions on the Above:	
Swaptions:	The SEF is also listing Physically-Settled Swaptions on
	the Index on the terms described herein.
Swaption Option Style:	European; the Swaptions may be exercised only on
	expiration.
Swaption Tenor:	The tenor of the Swaptions will be selected by the
	parties and will be no shorter than three months and no
	longer than three months less than the Swap Tenor.
Settlement:	The Swaption will be Physically Settled and, if
	exercised, will result in the parties entering into a swap

	on the Index on the terms described herein.
ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions):	
2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).
Index Sponsor:	Markit, which sponsors the Index, has published information on treatment of both legacy and future indices. The parties should consult Markit's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the Definitions required by the relevant DCO selected by the parties. The parties should consult the relevant DCO's documentation to determine the exact treatment. It is the SEFs understanding that the DCOs will be converting all trades to the 2014 definitions, with individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.

#### CDS Index Contract – European Crossover 5Y Swaps and Swaptions

Cummony	This servers "CDS Index Contract European Contract	
Summary:	This covers "CDS Index Contract – European Crossover	
	5Y Swaps and Swaptions". The European Crossover	
	index comprises 50 equally weighted credit default	
	swaps on the most liquid sub-investment grade European	
	corporate entities.	
Index:	ITRAXX.EUROPE CROSSOVER: Series 10 to current.	
Currency:	EUR	
Quoting Convention and Minimum Increment:	As agreed by counterparties.	
Minimum Size:	As agreed by counterparties.	
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a	
	premium to the seller in case of a credit event occurring.	
	Sell = Sell Protection, the seller of protection receives	
	the premium payments from the protection buyer. The	
	Seller owns the credit risk of the instrument.	
Swap Conventions:	European crossover indices are traded on spread.	
	Fixed coupon payments are calculated at a spread of 500	
	bps and exchanged on a quarterly basis.	
Swap Tenor:	5Y	
Effective Date:	The date on which parties begin calculating accrued	
	obligations such as fixed payments. Also known as the	
	start date of the swap.	
Maturity Date:	The final date on which the obligations no longer accrue	
	and the final payment occurs.	
Trade Types:	The following swap types may be executed on the tpSEF	
	Inc.:	
	Outrights	
	Roll Trades	
	Curve Trades	
Settlement:	Contingent payment - Payments related to credit event	
	settlement will be determined pursuant to the 2009	
	ISDA Credit Derivatives Determination Committees and	
	Auction Settlement Supplement, (i.e., the Big Bang	
	Protocol).	
	Fixed Quarterly cash payments - reflected in basis points	
	and paid by the protection buyer to the protection seller.	
	Upfront fee payment - The upfront fee is a portion of the	
	payments, expressed in percentage points of the	
	notional, which is present valued and paid immediately	
	to the seller.	
Swaptions on the Above:		
Swaptions:	The SEF is also listing Physically-Settled Swaptions on	
	the Index on the terms described herein.	
Swaption Option Style:	European; the Swaptions may be exercised only on	
	expiration.	
Swaption Tenor:	The tenor of the Swaptions will be selected by the	
Surprovi renovi	parties and will be no shorter than three months and no	
	longer than three months less than the Swap Tenor.	
Settlement:	The Swaption will be Physically Settled and, if	
Schemelle.	exercised, will result in the parties entering into a swap	
	on the Index on the terms described herein.	

ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions):	
2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).
Index Sponsor:	Markit, which sponsors the Index, has published information on treatment of both legacy and future indices. The parties should consult Markit's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the Definitions required by the relevant DCO selected by the parties. The parties should consult the relevant DCO's documentation to determine the exact treatment. It is the SEFs understanding that the DCOs will be converting all trades to the 2014 definitions, with individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.

## CDS Index Contract – European HiVol 5Y Swaps and Swaptions

Summary:	This covers "CDS Index Contract – European HiVol 5Y	
Summary.	Swaps and Swaptions" $-i.e.$ , an agreement to buy or sell	
	protection on a basket comprised of 30 equally weighted	
	credit default swaps on the widest spread non-financial	
Ter Jame	European corporate entities.	
Index:	ITRAXX.EUROPE HIVOL: Series 10 to current.	
Currency:	EUR	
Quoting Convention and Minimum Increment:	As agreed by counterparties.	
Minimum Size:	As agreed by counterparties.	
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a	
	premium to the seller in case of a credit event occurring.	
	Sell = Sell Protection, the seller of protection receives	
	the premium payments from the protection buyer. The	
	Seller owns the credit risk of the instrument.	
Swap Conventions:	European crossover indices are traded on spread.	
	Fixed coupon payments are calculated at a spread of 100	
	bps and exchanged on a quarterly basis.	
Swap Tenor:	5Y	
Effective Date:	The date on which parties begin calculating accrued	
	obligations such as fixed payments. Also known as the	
	start date of the swap.	
Maturity Date:	The final date on which the obligations no longer accrue	
·	and the final payment occurs.	
Trade Types:	The following swap types may be executed on the tpSEF	
	Inc.:	
	• Outrights	
	Roll Trades	
	Curve Trades	
Settlement:	Contingent payment - Payments related to credit event	
Settlement.	settlement will be determined pursuant to the 2009	
	ISDA Credit Derivatives Determination Committees and	
	Auction Settlement Supplement, ( <i>i.e.</i> , the Big Bang	
	Protocol).	
	Fixed Quarterly cash payments - reflected in basis points	
	and paid by the protection buyer to the protection seller.	
	Upfront fee payment - The upfront fee is a portion of the	
	payments, expressed in percentage points of the notional, which is present valued and paid immediately	
	to the seller.	
Smonthing on the Above	to the sener.	
Swaptions on the Above:	The SEE is also listing Dhypically Settled Severity and	
Swaptions:	The SEF is also listing Physically-Settled Swaptions on	
Constructions Office Office	the Index on the terms described herein.	
Swaption Option Style:	European; the Swaptions may be exercised only on	
	expiration.	
Swaption Tenor:	The tenor of the Swaptions will be selected by the	
	parties and will be no shorter than three months and no	
	longer than three months less than the Swap Tenor.	
Settlement:	The Swaption will be Physically Settled and, if	
	exercised, will result in the parties entering into a swap	
	on the Index on the terms described herein.	

ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions):	
2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).
Index Sponsor:	Markit, which sponsors the Index, has published information on treatment of both legacy and future indices. The parties should consult Markit's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the Definitions required by the relevant DCO selected by the parties. The parties should consult the relevant DCO's documentation to determine the exact treatment. It is the SEFs understanding that the DCOs will be converting all trades to the 2014 definitions, with individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.

## CDS Index Contract – European IG 5Y Swaps and Swaptions

Summony	This covers "CDS Index Contract – European IG 5Y	
Summary:	Swaps and Swaptions" $-i.e.$ , an agreement to buy or sell	
	protection on a basket of liquid European based entities	
Ter J	with an investment grade credit rating.	
Index:	ITRAXX.EUROPE: Series 10 to current.	
Currency:	EUR	
Quoting Convention and Minimum Increment:	As agreed by counterparties.	
Minimum Size:	As agreed by counterparties.	
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a	
	premium to the seller in case of a credit event occurring.	
	Sell = Sell Protection, the seller of protection receives	
	the premium payments from the protection buyer. The	
	Seller owns the credit risk of the instrument.	
Swap Conventions:	European IG indices are traded on spread.	
	Fixed coupon payments are calculated at a spread of 100	
	bps and exchanged on a quarterly basis.	
Swap Tenor:	5Y	
Effective Date:	The date on which parties begin calculating accrued	
	obligations such as fixed payments. Also known as the	
	start date of the swap.	
Maturity Date:	The final date on which the obligations no longer accrue	
	and the final payment occurs.	
Trade Types:	The following swap types may be executed on the tpSEF	
	Inc.:	
	Outrights	
	Roll Trades	
	Curve Trades	
Settlement:		
Settlement:	Contingent payment - Payments related to credit event settlement will be determined pursuant to the 2009	
	ISDA Credit Derivatives Determination Committees and	
	Auction Settlement Supplement, ( <i>i.e.</i> , the Big Bang	
	Protocol).	
	Fixed Quarterly cash payments - reflected in basis points	
	and paid by the protection buyer to the protection seller.	
	Upfront fee payment - The upfront fee is a portion of the	
	payments, expressed in percentage points of the	
	notional, which is present valued and paid immediately	
Comments and the Albertain	to the seller.	
Swaptions on the Above:		
Swaptions:	The SEF is also listing Physically-Settled Swaptions on	
	the Index on the terms described herein.	
Swaption Option Style:	European; the Swaptions may be exercised only on	
	expiration.	
Swaption Tenor:	The tenor of the Swaptions will be selected by the	
	parties and will be no shorter than three months and no	
	longer than three months less than the Swap Tenor.	
Settlement:	The Swaption will be Physically Settled and, if	
	exercised, will result in the parties entering into a swap	
	on the Index on the terms described herein.	

ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions):	
2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).
Index Sponsor:	Markit, which sponsors the Index, has published information on treatment of both legacy and future indices. The parties should consult Markit's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the Definitions required by the relevant DCO selected by the parties. The parties should consult the relevant DCO's documentation to determine the exact treatment. It is the SEFs understanding that the DCOs will be converting all trades to the 2014 definitions, with individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.

## CDS Index Contract – European IG 10Y Swaps and Swaptions

Summary:	This covers "CDS Index Contract – European IG 10Y	
Summary.	Swaps and Swaptions" – <i>i.e.</i> , an agreement to buy or sell	
	protection on a basket of liquid European based entities	
	with an investment grade credit rating.	
Index:	ITRAXX.EUROPE: Series 7 to current.	
Currency:	EUR	
Quoting Convention and Minimum Increment:	As agreed by counterparties.	
Minimum Size:	As agreed by counterparties.	
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a	
8	premium to the seller in case of a credit event occurring.	
	Sell = Sell Protection, the seller of protection receives	
	the premium payments from the protection buyer. The	
	Seller owns the credit risk of the instrument.	
Swap Conventions:	European IG indices are traded on spread.	
	Fixed coupon payments are calculated at a spread of 100	
	bps and exchanged on a quarterly basis.	
Swap Tenor:	10Y	
Effective Date:	The date on which parties begin calculating accrued	
	obligations such as fixed payments. Also known as the	
	start date of the swap.	
Maturity Date:	The final date on which the obligations no longer accrue	
	and the final payment occurs.	
Trade Types:	The following swap types may be executed on the tpSEF	
	Inc.:	
	Outrights	
	Roll Trades	
	Curve Trades	
Settlement:	Contingent payment - Payments related to credit event	
	settlement will be determined pursuant to the 2009	
	ISDA Credit Derivatives Determination Committees and	
	Auction Settlement Supplement, (i.e., the Big Bang	
	Protocol).	
	Fixed Quarterly cash payments - reflected in basis points	
	and paid by the protection buyer to the protection seller.	
	Upfront fee payment - The upfront fee is a portion of the	
	payments, expressed in percentage points of the	
	notional, which is present valued and paid immediately	
	to the seller.	
Smontions on the Above		
Swaptions on the Above:	The CEE is also listing Direct with Court of Courts'	
Swaptions:	The SEF is also listing Physically-Settled Swaptions on the Index on the terms described herein.	
Swantion Ontion Stula		
Swaption Option Style:	European; the Swaptions may be exercised only on	
Swantion Tanor:	expiration.	
Swaption Tenor:	The tenor of the Swaptions will be selected by the	
	parties and will be no shorter than three months and no	
	longer than three months less than the Swap Tenor.	

Settlement:	The Swaption will be Physically Settled and, if exercised, will result in the parties entering into a swa on the Index on the terms described herein.	
ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions):		
2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).	
Index Sponsor:	Markit, which sponsors the Index, has published information on treatment of both legacy and future indices. The parties should consult Markit's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.	
Cleared Transactions:	Transactions intended to be cleared will use the         Definitions required by the relevant DCO selected by         the parties.         The parties should consult the relevant DCO's         documentation to determine the exact treatment. It is         the SEFs understanding that the DCOs will be         converting all trades to the 2014 definitions, with         individual component excluded as describe above.	
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.	

#### CDS Index Contract – North America Investment Grade and High Yield Swaps and Swaptions

Contract Overview:	An agreement to buy or sell protection on a basket of liquid North America based entities with a high yield credit rating (CDX.NA.HY, CDX.NA.HY.B and CDX.NA.HY.BB) or an investment grade credit rating (CDX.NA.IG).
Index:	CDX.NA.HY: Series 8 to current.
	CDX.NA.HY.B: Series 8 to current.
	CDX.NA.HY.BB: Series 8 to current.
	CDX.NA.IG: Series 8 to current.
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a premium to the seller in case of a credit event occurring. Credit events include Bankruptcy, Failure to Pay and Restructuring.
	Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer. The Seller owns the credit risk of the instrument.
	High Yield indices such as the CDX.NA.HY are traded on price.
	Investment Grade indices such as the CDX.NA.IG are traded on spread.
Swap Conventions:	For CDX.NA.HY, CDX.NA.HY.B and CDX.NA.HY.BB, fixed coupon payments are calculated at a spread of 500 bps and exchanged on a quarterly basis.
	For CDX.NA.IG, fixed coupon payments are calculated at a spread of 100 bps and exchanged on a quarterly basis.
Swap Tenor:	3Y, 5Y, 7Y and 10Y or as otherwise agreed by the parties.
Tranching:	Transactions may have only one tranche, where all losses are allocated to the protection seller, starting with the first dollar of loss and ending only when the entire notional of the transaction has been exhausted or the Transaction itself expires.
	Transactions may also be tranched in a way in which losses are allocated to the protection seller only after a certain amount of losses have occurred on the Index (the "attachment point") and cease being allocated to the protection seller after a certain additional amount of losses have occurred on the Index (the "detachment

# CDS Index Contract - North America Investment Grade and High Yield Swaps and Swaptions

	CDX.NA.HY.B or CDX.I include:	In the case of tranched transactions in the CDX.NA.HY, CDX.NA.HY.B or CDX.NA.HY.BB, the tranches include:	
	Attachment Point	<b>Detachment Point</b>	
	0	10%	
	0	15%	
	10%	15%	
	15%	25%	
	25%	35%	
	35%	100%	
	In the case of tranched tra the tranches include:	nsactions in the CDX.NA.IG,	
	Attachment Point	Detachment Point	
	0	3%	
	3%	7%	
	7%	10%	
	7%	15%	
	10%	15%	
	15%	30%	
	15%	100%	
	In addition to the customa the parties may agree to c detachment points.	ry tranches enumerated above, ustom attachment and	
Effective Date:		begin calculating accrued payments. Also known as the	
Maturity Date:	The final date on which the and the final payment occ	ne obligations no longer accrue urs.	
Trade Types:	The following swap types	may be executed on the SEF:	
	Outrights		
	Roll Trades		
	Curve Trades		
Settlement:		ments related to credit event ined pursuant to the relevant ow).	
		nents - reflected in basis points buyer to the protection seller.	
	payments, expressed in pe	e upfront fee is a portion of the ercentage points of the valued and paid immediately	

	to the seller.
Swaptions on the Above	
Swaptions:	The SEF is also listing Physically-Settled Swaptions on each of the CDX.NA.HY, CDX.NA.HY.B, CDX.NA.HY.BB and CDX.NA.IG on the terms described herein.
Swaption Option Style:	European; the Swaptions may be exercised only on expiration.
Swaption Tenor:	The tenor of the Swaptions will be selected by the parties and will be no shorter than three months and no longer than three months less than the Swap Tenor.
Settlement:	The Swaption will be Physically Settled and, if exercised, will result in the parties entering into a swap on the Index on the terms described herein.
Tranching:	Swaptions may be written on tranched or untranched transactions.
ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions)	
2014/2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).
Index Sponsor:	IHS Markit Ltd, which sponsors the Index, has published information on treatment of both legacy and future indices.
	The parties should consult IHS Markit Ltd's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the Definitions required by the relevant DCO selected by the parties.
	The parties should consult the relevant DCO's documentation to determine the exact treatment. It is the SEFs understanding that the DCOs will be converting all trades to the 2014 definitions, with individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.

## **CDS Index Contracts – CMBX**

Summary:	This covers uncleared credit default swaps on IHS Markit Ltd's "CMBX Indices" ("CDS Index Contracts – CMBX"). The terms under which CDS Index Contracts – CMBX may be traded are shown below.	
Contract Overview:	An agreement to buy or sell protection on one of the IHS Markit Ltd CMBX Indices listed under the heading "Index" immediately below. Each such index is composed of twenty-five (25) equally-weighted reference obligations that are tranches of commercial mortgage-backed securities offerings that meet the relevant eligibility criteria published by IHS Markit Ltd from time to time.	
Index:	CMBX.NA.AAA: Series 6 to current.	
	CMBX.NA.AS: Series 6 to current.	
	CMBX.NA.AA: Series 6 to current.	
	CMBX.NA.A: Series 6 to current.	
	CMBX.NA.BBB-: Series 6 to current.	
	CMBX.NA.BB: Series 6 to current.	
Currency:	USD	
Quoting Convention and Minimum Increment:	As agreed by counterparties.	
Minimum Size:	As agreed by counterparties.	
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a premium to the seller and receives a payment from the seller of protection in the case of a credit event occurring.	
	Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer and makes a payment to the buyer of protection in the case of a credit event occurring. The Seller owns the credit risk of the instrument.	
	The indices are traded on spread.	
Swap Conventions:	Fixed coupon payments are calculated at the applicable spread specified below:	
	• CMBX.NA.AAA: 50 bps	
	• CMBX.NA.AS: 100 bps	
	• CMBX.NA.AA: 150 bps	
	• CMBX.NA.A: 200 bps	
	CMBX.NA.BBB-: 300 bps	
	CMBX.NA.BB: 500 bps	
	Fixed coupon payments are exchanged on a monthly basis.	

Swap Tenor:	As agreed by counterparties, subject to applicable law.
Effective Date:	The date (to be agreed by the counterparties) on which parties begin calculating accrued obligations such as fixed payments. Also known as the start date of the swap.
Maturity Date:	The final date (to be agreed by the counterparties) on which the obligations no longer accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF Inc.:
	<ul><li>Outrights</li><li>Roll Trades</li></ul>
Settlement:	<u>Contingent Payment</u> : Payments related to credit event settlement will be determined pursuant to the 2014 ISDA Credit Derivatives Definitions as published by the International Swaps and Derivatives Association, Inc. Such payments are paid by the protection seller to the protection buyer.
	<u>Fixed Monthly Cash Payments</u> : Reflected in basis points and paid by the protection buyer to the protection seller.
	<u>Upfront Fee Payment</u> : The upfront fee is a portion of the payments, expressed in percentage points of the notional, which is present valued and paid at the inception of the Contract by the protection buyer to the protection seller.

## <u>CDS Index Contracts – iTraxx Australia</u>

Summary:	This covers uncleared credit default swaps on IHS Markit Ltd's "iTraxx <sup>®</sup> Australia Index" ("CDS Index Contracts – iTraxx Australia"). The terms under which CDS Index Contracts – iTraxx Australia may be traded are shown below.
Contract Overview:	An agreement to buy or sell protection on an index composed of twenty five (25) liquid Australian entities with investment grade credit ratings that trade in the CDS market or have significant domestic bond issuance as published by IHS Markit Ltd. from time to time.
Index:	iTraxx <sup>®</sup> Australia Index: Series 30 to current.
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a premium to the seller in case of a credit event occurring.
	Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer. The Seller owns the credit risk of the instrument.
	The indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of 100 bps and exchanged on a quarterly basis.
Swap Tenor:	As agreed by counterparties, subject to Applicable Law.
Effective Date:	The date (to be agreed by the counterparties) on which parties begin calculating accrued obligations such as fixed payments. Also known as the start date of the swap.
Maturity Date:	The final date (to be agreed by the counterparties) on which the obligations no longer accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF Inc.: • Outrights • Roll Trades • Curve Trades
Settlement:	<u>Contingent Payment</u> : Payments related to credit event settlement will be determined pursuant to the 2014 ISDA Credit Derivatives Definitions as published by the International Swaps and Derivatives Association, Inc. <u>Fixed Quarterly Cash Payments</u> : Reflected in basis points and paid by the protection buyer to the protection seller.

<u>Upfront Fee Payment</u> : The upfront fee is a portion of the payments, expressed in percentage points of the notional, which is present valued and paid at the inception of the
Contract by the protection buyer to the protection seller.

## <u>CDS Index Contracts – iTraxx Japan</u>

Summary:	This covers uncleared credit default swaps on IHS Markit Ltd's "Markit iTraxx <sup>®</sup> Japan Index" ("CDS Index Contracts – iTraxx Japan"). The terms under which CDS Index Contracts – iTraxx Japan may be traded are shown below.
Contract Overview:	An agreement to buy or sell protection on an index composed of forty (40) Japanese entities with investment grade credit ratings that trade in the CDS market as published by IHS Markit Ltd. from time to time.
Index:	Markit iTraxx <sup>®</sup> Japan Index: Series 30 to current.
Currency:	JPY
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a premium to the seller in case of a credit event occurring.
	Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer. The Seller owns the credit risk of the instrument.
	The indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of 100 bps and exchanged on a quarterly basis.
Swap Tenor:	As agreed by counterparties, subject to Applicable Law.
Effective Date:	The date (to be agreed by the counterparties) on which parties begin calculating accrued obligations such as fixed payments. Also known as the start date of the swap.
Maturity Date:	The final date (to be agreed by the counterparties) on which the obligations no longer accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF Inc.: Outrights Roll Trades Curve Trades
Settlement:	<u>Contingent Payment</u> : Payments related to credit event settlement will be determined pursuant to the 2014 ISDA Credit Derivatives Definitions as published by the International Swaps and Derivatives Association, Inc.
	<u>Fixed Quarterly Cash Payments</u> : Reflected in basis points and paid by the protection buyer to the protection seller.
	<u>Upfront Fee Payment</u> : The upfront fee is a portion of the

	payments, expressed in percentage points of the notional, which is present valued and paid at the inception of the Contract by the protection buyer to the protection seller.
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#### CDS Index Contracts – ITRXAEJ.IG (iTraxx® Asia ex-Japan Investment Grade)

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Summary:	This covers "CDS Index Contracts – ITRXAEJ.IG
	(iTraxx <sup>®</sup> Asia ex-Japan Investment Grade)" $-i.e.$ , an
	agreement to buy or sell protection on a broad-based
	basket of investment grade Asian corporate and
	sovereign/agency issuers (excluding Japanese issuers).
Index:	ITRXAEJ.IG (iTraxx® Asia ex-Japan Investment
	Grade): Series 14 through current, so long as such Index
	is not a narrow-based Index.
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a
	premium to the seller in case of a credit event occurring.
	Credit events include Bankruptcy and Failure to Pay.
	Sell = Sell Protection, the seller of protection receives
	the premium payments from the protection buyer. The
	Seller owns the credit risk of the instrument.
	Investment Grade indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of 100
•	bps and exchanged on a quarterly basis.
Swap Tenor:	As agreed by the parties, subject to Applicable Law.
Effective Date:	The date on which parties begin calculating accrued
	obligations such as fixed payments. Also known as the
	start date of the swap.
Maturity Date:	The final date on which the obligations no longer accrue
	and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF
	Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent payment - Payments related to credit event
Settement	settlement will be determined pursuant to the 2003
	ISDA Credit Derivatives Definitions, as modified by the
	2009 ISDA Credit Derivatives Determination
	Committees and Auction Settlement Supplement ( <i>i.e.</i> ,
	the Big Bang and Little Bang Protocols) and the ISDA
	2014 Credit Derivatives Protocol (for Series 21 and
	prior) and the ISDA 2014 Definitions (for Series 22 and
	later).
	Fixed Quarterly cash payments - reflected in basis points
	and paid by the protection buyer to the protection seller.
	Upfront payment - The upfront payment is a portion of
	the payments, expressed in percentage points of the
	notional, which is present valued and paid immediately
	to the seller.

## **CDS Index Contracts – MCDX Index**

Summary:	This covers uncleared credit default swaps on IHS Markit Ltd's MCDX Index ("CDS Index Contracts – MCDX Index"). The terms under which CDS Index Contracts – MCDX Index may be traded are shown below.
Contract Overview:	Until October 2018, an agreement to buy or sell protection on a broad-based index composed of fifty (50) municipal credits.
	Beginning with MCDX.NA Series 31 in October 2018, an agreement to buy or sell protection on a broad-based index composed of twenty (20) municipal credits.
Index:	MCDX: all series
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a premium to the seller in case of a credit event occurring. Credit events include "Bankruptcy" and "Failure to Pay."
	Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer. The Seller owns the credit risk of the instrument.
	MCDX indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of 100 bps coupon and exchanged on a quarterly basis at 75% recovery.
Swap Tenor:	3 years, 5 years, 10 years
Effective Date:	The date (to be agreed by the counterparties) on which parties begin calculating accrued obligations such as fixed payments. Also known as the start date of the swap.
Maturity Date:	The final date (to be agreed by the counterparties) on which the obligations no longer accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF Inc.:
	Outrights
	Roll Trades
	Curve Trades

Settlement:	<u>Contingent Payment</u> : Payments related to credit event settlement will be determined pursuant to the 2003 ISDA Credit Derivatives Definitions, as modified by the 2009 ISDA Credit Derivatives Determinations Committees and Auction Settlement Supplement thereto.
	<u>Fixed Quarterly Cash Payments</u> : Reflected in basis points and paid by the protection buyer to the protection seller.
	<u>Upfront Fee Payment</u> : The upfront fee is a portion of the payments, expressed in percentage points of the notional, which is present valued and paid immediately to the seller.

## **Commodity Index Swaps**

Summary:	This covers commodity index swaps (each, a "Commodity Index Swap").
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and
	standards:
	2005 ISDA Commodity Derivatives Definitions
	("Commodity Definitions")
Product Type/ISDA OTC Taxonomy:	( commonly Deminuons )
ISDA OTC Asset Class:	Commodity
ISDA OTC Base Product:	Index
ISDA OTC Transaction type:	Swap
ISDA OTC Settlement type:	Cash
Terms:	
Trade Date:	The date on which the contract is entered into.
Effective Date:	As specified by the parties.
Termination Date:	As specified by the parties.
Commodity:	The index specified by the parties from among the
	indices listed in the table below titled "Commodity Index
	Swap Available Indices."
Total Notional Quantity:	The sum of the Notional Quantities per Calculation
	Period.
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period
	Basis.
Calculation Periods:	As specified by the parties.
Payment Dates:	In relation to each Calculation Period, as specified by the
	parties.
Business Day Convention:	As specified by the parties.
Fixed Amount:	
Fixed Price Payer:	As specified by the parties.
Fixed Price or Fixed Amount:	As specified by the parties, expressed as a rate or overall
Floating Amount:	
Floating Price Payer:	As specified by the parties.
Floating Price:	In relation to each Calculation Period, the level of the
	specified Available Commodity Index at the end of the
	such Calculation Period less the level of the specified
	Available Commodity Index at the start of the such
	Calculation Period, the result of which is divided by the
	level of the specified Available Commodity Index at the
	start of the such Calculation Period.
Market Disruption:	
Market Disruption Events:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Additional Market Disruption Events:	As specified by the parties.
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Disruption Fallbacks:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Fallback Reference Price:	None, unless specified by the parties.
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the
	Commodity Definitions.

Minimum and Incremental Price:	The minimum price is \$10,000,000 and the minimum
	incremental price is \$1,000,000.
Calculation Agent:	As agreed by the parties.

#### Commodity Index Swap Available Commodity Indices

Abbr	Name
ВСОМ	BCOM ER
BCOMF1	BCOM F1 ER
BCOMF2	BCOM F2 ER
BCOMF3	BCOM F3 ER
BCOMF4	BCOM F4 ER
BCOMF5	BCOM F5 ER
BCOMF6	BCOM F6 ER
BCOMAG	BCOM Agriculture ER
BCOMEN	BCOM Energy ER
BCOMGR	BCOM Grains ER
BCOMIN	BCOM Industrial Metals ER
BCOMLI	BCOM Livestock ER
BCOMPE	BCOM Petroleum ER
BCOMPR	BCOM Precious Metals ER
BCOMSO	BCOM Softs ER
BCOMXAG	BCOM ex-Agriculture ER
BCOMXAL	BCOM ex-Agriculture and Livestock ER
BCOMXE	BCOM ex-Energy ER
BCOMXGR	BCOM ex-Grains ER
BCOMXIM	BCOM ex-Industrial Metals ER
BCOMXLI	BCOM ex-Livestock ER
BCOMXPE	BCOM ex-Petroleum ER
BCOMXPM	BCOM ex-Precious Metals ER
BCOMXSO	BCOM ex-Softs ER
BCOMAL	BCOM Aluminum ER
BCOMCO	BCOM Brent Crude ER
BCOMCC	BCOM Cocoa ER
BCOMKC	BCOM Coffee ER
BCOMHG	BCOM Copper ER
BCOMCN	BCOM Corn ER
BCOMCT	BCOM Cotton ER
BCOMFC	BCOM Feeder Cattle ER
BCOMGO	BCOM Gas Oil ER
BCOMGC	BCOM Gold ER
ВСОМНО	BCOM Heating Oil ER
BCOMPB	BCOM Lead ER
BCOMLH	BCOM Lean Hogs ER
BCOMLC	BCOM Live Cattle ER

Abbr	Name
BCOMNG	BCOM Natural Gas ER
BCOMNI	BCOM Nickel ER
BCOMOJ	BCOM Orange Juice ER
BCOMPA	BCOM Palladium ER
BCOMPL	BCOM Platinum ER
BCOMSI	BCOM Silver ER
BCOMSM	BCOM Soybean Meal ER
BCOMSM1	Bloomberg Soybean Meal Subindex 1 Month Forward
ВСОМВО	BCOM Soybean Oil ER
BCOMSY	BCOM Soybeans ER
BCOMSB	BCOM Sugar ER
BCOMSN	BCOM Tin ER
BCOMRB	BCOM Unleaded Gas ER
BCOMWH	BCOM Wheat ER
BCOMKW	BCOM Kansas Wheat ER
BCOMCL	BCOM WTI Crude Oil ER
BCOMZS	BCOM Zinc ER
BCOMAU	BCOM AUD ER
BCOMEU	BCOM EUR ER
BCOMGB	BCOM GBP ER
BCOMCH	BCOM CHF ER
BCOMJY	BCOM JPY ER
BCOMALC	BCOM Aluminum Capped ER
BCOMKCC	BCOM Coffee Capped ER
BCOMHGC	BCOM Copper Capped ER
BCOMCLC	BCOM WTI Crude Oil Capped ER
BCOMCNC	BCOM Corn Capped ER
BCOMLCC	BCOM Cattle Capped ER
BCOMCTC	BCOM Cotton Capped ER
BCOMGCC	BCOM Gold Capped ER
BCOMLHC	BCOM Lean Hogs Capped ER
BCOMHOC	BCOM Heating Oil Capped ER
BCOMKWC	BCOM Kansas Wheat Capped ER
BCOMCOC	BCOM Brent Crude Capped ER
BCOMNGC	BCOM Natural Gas Capped ER
BCOMNIC	BCOM Nickel Capped ER
BCOMSYC	BCOM Soybeans Capped ER
BCOMBOC	BCOM Soybean Oil Capped ER
BCOMSIC	BCOM Silver Capped ER
BCOMSBC	BCOM Sugar Capped ER
BCOMSMC	BCOM Soybean Meal Capped ER
BCOMRBC	BCOM Unleaded Gas Capped ER

Abbr	Name
BCOMWHC	BCOM Wheat Capped ER
BCOMZSC	BCOM Zinc Capped ER
BCOMTR	BCOM TR
BCOMF1T	BCOM F1 TR
BCOMF2T	BCOM F2 TR
BCOMF3T	BCOM F3 TR
BCOMF4T	BCOM F4 TR
BCOMF5T	BCOM F5 TR
BCOMF6T	BCOM F6 TR
BCOMRS	BCOM Roll Select
DJCICN	Dow Jones Commodity Index Corn
DJCISB	Dow Jones Commodity Index Sugar
DJCILC	Dow Jones Commodity Index Live Cattle
DJCIAW	Dow Jones Commodity Index All Wheat
SPGCCI	S&P GSCI
SPGCBO	S&P GSCI Soybean Oil
SPGCBR	S&P GSCI Brent Crude
SPGCCC	S&P GSCI Cocoa
SPGCCL	S&P GSCI Crude Oil
SPGCCN	S&P GSCI Corn
SPGCCT	S&P GSCI Cotton
SPGCFC	S&P GSCI Feeder Cattle
SPGCGC	S&P GSCI Gold
SPGCGO	S&P GSCI Gasoline
SPGCHG	S&P GSCI North American Copper
SPGCHO	S&P GSCI Heating Oil
SPGCHU	S&P GSCI Unleaded Gasoline
SPGCIA	S&P GSCI Aluminum
SPGCIC	S&P GSCI Copper
SPGCIK	S&P GSCI Nickel
SPGCIL	S&P GSCI Lead
SPGCIN	S&P GSCI Industrial Metals
SPGCIZ	S&P GSCI Zinc
SPGCKC	S&P GSCI Coffee
SPGCKW	S&P GSCI Kansas Wheat
SPGCLC	S&P GSCI Live Cattle
SPGCLH	S&P GSCI Lean Hogs
SPGCNG	S&P GSCI Natural Gas
SPGCPA	S&P GSCI Palladium
SPGCPL	S&P GSCI Platinum
SPGCSB	S&P GSCI Sugar
SPGCSI	S&P GSCI Silver

Abbr	Name	
SPGCSO	S&P GSCI Soybeans	
SPGCWH	S&P GSCI Wheat	
SPGSES	S&P GSCI Enhanced Commodity	
SPGSSM	S&P GSCI Soybean Meal	
SPGCCIP	S&P GSCI ER	
SPGCBRP	S&P GSCI Brent Crude ER	
SPGCCCP	S&P GSCI Cocoa ER	
SPGCCLP	S&P GSCI Crude Oil ER	
SPGCCNP	S&P GSCI Corn ER	
SPGCCTP	S&P GSCI Cotton ER	
SPGCENP	S&P GSCI Energy ER	
SPGCFCP	S&P GSCI Feeder Cattle ER	
SPGCGCP	S&P GSCI Gold ER	
SPGCGOP	S&P GSCI Gasoil ER	
SPGCHGP	S&P GSCI North American Copper ER	
SPGCHOP	S&P GSCI Heating Oil ER	
SPGCHUP	S&P GSCI Unleaded Gasoline ER	
SPGCIAP	S&P GSCI Aluminum ER	
SPGCICP	S&P GSCI Copper ER	
SPGCIKP	S&P GSCI Nickel ER	
SPGCILP	S&P GSCI Lead ER	
SPGCINP	S&P GSCI Industrial Metals ER	
SPGCNGP	S&P GSCI Natural Gas ER	
SG3MCI	S&P GSCI 3 Month Forward	

# **Deliverable Foreign Exchange Options**

Summary:	This covers "Deliverable Foreign Exchange Options".
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards:
	(a) the 1998 FX and Currency Option Definitions, as amended and supplemented from time to time, including the 2005 Barrier Option Supplement to the 1998 FX and Currency Option Definitions (the "1998 Definitions"); and
	(b) ISDA OTC Taxonomies.
Contract Types:	Each Deliverable Foreign Exchange Option traded is bespoke and the terms agreed between the Buyer and Seller. All option strategies result in call options and/or put options executed with the following strategies traded as agreed between the parties:
	Vanilla: Outright Call / Put, Straddle, Strangle, Butterfly, Risk Reversal, Calendar (tenor) spread, Cross Currency Spread, Condor, Call Spread, Put Spread, Live Trading with no delta hedge.
	Exotic: Barriers, Baskets, Digitals (or Binary), Knockins, Knockouts, Reverse Knockins/Kockouts, No Touch, Double No Touch, Average Price, Worst of Options, Compound Options; trades may be with or without delta hedges and some structures may also be bilaterally negotiated with additional options as part of the package to form a vega hedge.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Foreign Exchange
ISDA OTC Base Product:	Vanilla Option, Simple Exotic or Complex Exotic
Terms:	
Trade Date:	The date the transaction is agreed between and becomes legally binding on the parties.
Commencement Date:	The Trade Date, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.
Buyer:	As specified by the parties.
Seller:	As specified by the parties.
Currency Option Style:	As specified by the parties.
	(An American option can be exercised any time up to and including the Expiration Date; a European option can only be exercised on the Expiration Date.)
Currency Option Type:	A Call with respect to the Call Currency and a Put with respect to the Put Currency; Binary in the case of a binary

	or digital option.
Call Currency:	The currency as specified by the parties from among those included in the list of available Currency Pairs.
	The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.
Call Currency Amount:	As specified by the parties or, if not so specified, derived from the Put Currency Amount and Strike Price.
Put Currency:	The currency as specified by the parties from among those included in the list of available Currency Pairs.
	The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.
Put Currency Amount:	As specified by the parties or, if not so specified, derived from the Call Currency Amount and Strike Price.
Strike Price:	As specified by the parties (if only one of the Put Currency or Call Currency is specified).
	If no Strike Price is specified and Automatic Exercise is applicable, the Strike Price will be calculated using the Put Currency and Call Currency in order to determine if the option is to be automatically exercised.
Reference Currency:	As specified by the parties.
Settlement Currency:	As specified by the parties.
Settlement Rate:	As specified by the parties or otherwise per the 1998 Definitions.
Settlement Rate Option:	As specified by the parties.
Expiration Date:	As specified by the parties.
Expiration Time:	The time in the location specified by the parities.
Latest Exercise Time:	The Expiration Time, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.
Automatic Exercise:	Applicable, unless otherwise specified by the parties.
Settlement:	Deliverable or Cash Settlement
Settlement Amount:	In the case of a digital or binary option, as specified by the parties.
Settlement Date:	As specified by the parties.
Valuation Date:	As specified by the parties.
Averaging Dates:	As specified by the parties.
Premium:	As specified by the parties.
Premium Payment Date:	As specified by the parties.
Barrier Event:	As specified by the parties.

Calculation Agent:	As specified by the parties.
Business Day:	As specified by the parties.
Business Day Convention:	As specified by the parties.
Disruption Events:	As specified by the parties.
Disruption Fallbacks:	As specified by the parties for each applicable Disruption Event or otherwise per the 1998 Definitions.

	e		5	
AUD/CAD	CNH/AUD	EUR/SAR	JPY/CNH	THB/HKD
AUD/CHF	CNH/CAD	EUR/SEK	JPY/HKD	THB/JPY
AUD/CNH	CNH/EUR	EUR/SGD	JPY/SGD	THB/NZD
AUD/HKD	CNH/GBP	EUR/THB	JPY/THB	THB/SGD
AUD/JPY	CNH/HKD	EUR/TRY	MXN/JPY	TRY/JPY
AUD/MXN	CNH/JPY	EUR/USD	NOK/JPY	USD/AED
AUD/NOK	CNH/NZD	EUR/ZAR	NOK/SEK	USD/BHD
AUD/NZD	CNH/SGD	GBP/AUD	NZD/CAD	USD/CAD
AUD/SEK	CNH/THB	GBP/CAD	NZD/CHF	USD/CHF
AUD/SGD	EUR/AED	GBP/CHF	NZD/CNH	USD/CNH
AUD/THB	EUR/AUD	GBP/CNH	NZD/HKD	USD/CZK
AUD/USD	EUR/BHD	GBP/HKD	NZD/JPY	USD/DKK
AUD/ZAR	EUR/CAD	GBP/JPY	NZD/NOK	USD/HKD
CAD/CHF	EUR/CHF	GBP/MXN	NZD/SEK	USD/HUF
CAD/CNH	EUR/CNH	GBP/NOK	NZD/SGD	USD/ILS
CAD/HKD	EUR/CZK	GBP/NZD	NZD/THB	USD/ISK
CAD/JPY	EUR/DKK	GBP/SEK	NZD/USD	USD/JPY
CAD/MXN	EUR/GBP	GBP/SGD	SEK/JPY	USD/KWD
CAD/NOK	EUR/HKD	GBP/THB	SGD/AUD	USD/MXN
CAD/SEK	EUR/HUF	GBP/TRY	SGD/CAD	USD/NOK
CAD/SGD	EUR/ILS	GBP/USD	SGD/CNH	USD/OMR
CAD/THB	EUR/ISK	GBP/ZAR	SGD/EUR	USD/PLN
CHF/CNH	EUR/JPY	HKD/AUD	SGD/GBP	USD/QAR
CHF/HKD	EUR/KWD	HKD/CAD	SGD/HKD	USD/RON
CHF/JPY	EUR/MXN	HKD/CHF	SGD/JPY	USD/RUB
CHF/MXN	EUR/NOK	HKD/CNH	SGD/NZD	USD/SAR
CHF/NOK	EUR/NZD	HKD/EUR	SGD/THB	USD/SEK

# Deliverable Foreign Exchange Option Available Currency Pairs

CHF/PLN	EUR/OMR	HKD/GBP	THB/AUD	USD/SGD
CHF/SEK	EUR/PLN	HKD/JPY	THB/CHF	USD/THB
CHF/SGD	EUR/QAR	HKD/NZD	THB/CNH	USD/TRY
CHF/THB	EUR/RON	HKD/SGD	THB/EUR	USD/ZAR
CHF/TRY	EUR/RUB	HKD/THB	THB/GBP	ZAR/JPY

# Equity Index Swaps

Summary:	This covers equity index swaps (each, an "Equity Index Swap").
Limitations on Available Selections and Default Settings:	The terms under which an Equity Index Swap may be traded are shown below or in the attached tables.
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made.
	For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.
	In some cases, the same contract might have different terms depending on the market in which it is traded ( <i>e.g.</i> , London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards:
	<ul> <li>(a) 2006 ISDA Definitions</li> <li>(b) 2002 ISDA Equity Derivatives Definitions ("Equity</li> </ul>
	Definitions") (c) Annex IS to 2009 Americas Master Equity Derivatives Confirmation, to 2007 European Master Equity Derivatives Confirmation Agreement (for EMEA indices, as indicated on the Equity Index Available Indices attached) or to Second Revised 2005 AEJ Interdealer Master Equity Derivatives Confirmation
	Agreement (for AEJ indices, as indicated on the Equity Index Available Indices attached) (d) the Revised ISDA AEJ Reference Price Source

	Matrix (June 25, 2009, or as updated effective prior to
	the Trade Date) ("AEJ Source")
	For convenience, certain terms are mapped to their FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Equity
ISDA OTC Base Product:	Swap
ISDA OTC Sub-Product:	Price Return Basic Performance
ISDA OTC Transaction type:	Single Index
Further Limitations:	None
Terms:	
Trade Date:	As agreed by the parties.
Strike Date:	For a Forward Starting Transaction, as agreed by the parties (only for EMEA Indices).
Forward Starting:	As per Annex IS (only for EMEA Indices).
Notional Amount ("notional"):	An amount in one of the Available Currencies (see below) agreed by the parties.
Effective Date ("effectiveDate"):	<ul> <li>(i) The date specified by the parties, adjusted in accordance with any applicable Business Day Convention, or (ii) in the case of AEJ Indices, per Annex IS.</li> </ul>
Effective Date Business Days:	As specified by the parties from among the Available Business Days (except for AEJ Indices).
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions (except for AEJ Indices).
Termination Date ("terminationDate"):	Per Annex IS, unless otherwise specified by the parties.
Index:	As specified by the parties from among the Available Indices.
Number of Index Units:	As specified by the parties or, if not so specified, determined by Annex IS (except for AEJ Indices).
Index Unit:	Per Annex IS (except for AEJ Indices and EMEA Indices).
Exchange(s):	(i) Per Annex IS, unless otherwise specified by the parties, or (ii) in the case of AEJ Indices, as specified by the parties.
Multiple Exchange Index Annex/Component Security Index Annex:	Per Annex IS (EMEA Indices only).
Related Exchanges:	(i) Per Annex IS, unless otherwise specified by the parties, or (ii) in the case of AEJ Indices, as specified by the parties.
Hedging Party:	(i) As specified by the parties, or (ii) in the case of AEJ Indices, per Annex IS.
Determining Party:	(i) As specified by the parties, or (ii) in the case of AEJ Indices, per Annex IS.
Equity Amounts:	
Equity Amount Payer ("payerPartyReference"):	As specified by the parties.
Equity Notional Amount:	As specified by the parties.
Equity Notional Reset:	As per Annex IS.
Type of Return:	(i) As specified by the parties, or (ii) in the case of AEJ Indices, per Annex IS unless specified by the parties.
Initial Price Election:	As specified by the parties (in the case of an EMEA Index only).
Initial Price:	As specified by the parties and (other than in the case of AEJ Indices) adjusted in accordance with Annex IS.

Final Price Election:	As specified by the parties (in the case of an EMEA
<b>F</b> '1 <b>D</b> .'	Index only).
Final Price:	(i) As per Annex IS, or (ii) in the case of AEJ Indices, as
	specified by the parties or, if not so specified, per the
Valuation Time:	Equity Definitions.
valuation Time:	(i) As per Annex IS, or (ii) in the case of AEJ Indices, as specified by the parties or, if not so specified, per the
	Equity Definitions.
Valuation Dates:	As specified by the parties.
Averaging Dates:	In the case of AEJ Indices, as and if specified by the
Averaging Dates.	parties.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Notional Amount ("notional Amount"):	(i) As per Annex IS, or (ii) in the case of AEJ Indices, as
Notional Amount ( notional Amount ).	specified by the parties or, if not so specified, per the
	Equity Definitions.
Payment Dates:	As per Annex IS, unless otherwise specified by the
r ayment Dates.	parties.
Initial Floating Rate:	As specified by the parties.
Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
Designated Maturity ("indexTenor"):	As specified by the parties.
Linear Interpolation:	For the Calculation Periods specified by the parties to the
Enical Interpolation.	extent permitted by Annex IS.
Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation
Shorter Designated Maturity for Enfeat interpolation.	applies, as specified by the parties.
Longer Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation
Longer Designated maturity for Enfeat interpolation.	applies, as specified by the parties.
Spread:	As specified by the parties.
Day Count Fraction:	As specified by the parties.
Reset Dates ("resetDate"):	As per Annex IS.
Payment Dates Business Days:	As per Annex IS.
Business Days (Other Than Payment Dates):	As specified by the parties.
Business Day Convention (Other Than Payment Dates):	As per Annex IS, unless otherwise specified by the
	parties.
Compounding:	As specified by the parties (EMEA Indices only).
Compounding Dates:	As specified by the parties if Compounding is applicable
	(EMEA Indices only).
Futures Price Valuation:	
Futures Price Valuation:	(i) As per Annex IS, unless otherwise specified by the
	parties, or (ii) in the case of AEJ Indices, as specified by
	the parties or, if not so specified, per the Equity
	Definitions.
Exchange-traded Contract:	As specified in the Transaction Supplement.
Adjustment to Section 6.8 of the Equity Definitions:	As per Annex IS (other than in the case of AEJ Indices).
Settlement Terms:	
Cash Settlement:	As per Annex IS.
Settlement Currency:	(i) As per Annex IS, or (ii) in the case of AEJ Indices, as
	agreed by the parties.
FX Rate:	As agreed by the parties or as specified by the parties
	from among the Available FX Rates.

Dividends:	
Dividend Payment Date(s):	If type of return is "Total Return" (i) as per Annex IS
•	unless otherwise agreed by the parties, or (ii) in the case
	of AEJ Indices, as agreed by the parties or, absent such
	agreement, per the Equity Definitions.
Dividend Period:	If type of return is "Total Return" (i) as per Annex IS, or
	(ii) in the case of AEJ Indices, as agreed by the parties
	or, absent such agreement, per the Equity Definitions.
Dividend Amount:	If type of return is "Total Return" (i) as per Annex IS, or
	(ii) in the case of AEJ Indices, as agreed by the parties
	or, absent such agreement, per the Equity Definitions.
Relevant Dividend:	If type of return is "Total Return" (i) as per Annex IS, or
	(ii) in the case of AEJ Indices, as agreed by the parties
	or, absent such agreement, per the Equity Definitions.
Reinvestment of Dividends:	If type of return is "Total Return" (i) as per Annex IS, or
	(ii) in the case of AEJ Indices, as agreed by the parties.
Dividend Recovery:	If type of return is "Total Return" (i) as per Annex IS, or
	(ii) in the case of AEJ Indices, as agreed by the parties
	or, absent such agreement, per the Equity Definitions.
Declared Cash Dividend Percentage:	If type of return is "Total Return" (i) as per Annex IS
	unless otherwise agreed by the parties, (ii) in the case of
	AEJ Indices, as and if agreed by the parties, or (iii) in the
	case of EMEA Indices, as agreed by the parties.
Declared Cash Equivalent Dividend Percentage:	If type of return is "Total Return" (i) as per Annex IS
	unless otherwise agreed by the parties, or (ii) in the case
	of AEJ Indices, as and if agreed by the parties.
Index Adjustment Events:	
Index Cancellation:	As per Annex IS.
Index Modification:	As per Annex IS.
Index Disruption:	As per Annex IS.
Additional Disruption Events:	
Change in Law:	(i) As agreed by the parties from among the provisions in
	Annex IS, or (ii) in the case of AEJ Indices, as per
	Annex IS unless otherwise agreed by the parties.
Insolvency Filing:	(i) As per Annex IS, or (ii) in the case of AEJ Indices, as
	agreed by the parties or, absent such agreement, per the
	Equity Definitions.
Hedging Disruption:	(i) As agreed by the parties from among the provisions in
	Annex IS, or (ii) in the case of AEJ Indices, as per
	Annex IS (as applicable to the relevant country of
	underlier) unless otherwise agreed by the parties.
Increased Cost of Hedging:	(i) As agreed by the parties from among the provisions in
	Annex IS, or (ii) in the case of AEJ Indices, as agreed by
	the parties or, absent such agreement, per the Equity
	Definition.
Consequences of Hedging Disruption:	(i) As agreed by the parties from among the provisions in
	Annex IS, or (ii) in the case of AEJ Indices, as agreed by
	the parties or, absent such agreement, per the Equity
	Definition.
Loss of Stock Borrow:	Definition.           (i) As per Annex IS, unless otherwise specified by the
Loss of Stock Borrow:	Definition.(i) As per Annex IS, unless otherwise specified by the parties, or (ii) in the case of AEJ Indices, as agreed by
Loss of Stock Borrow:	Definition.           (i) As per Annex IS, unless otherwise specified by the

Increased Cost of Stock Borrow:	(i) As per Annex IS, unless otherwise specified by the parties, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definition.
Cancellation Amount:	(i) As agreed by the parties from among the provisions in Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definition.
Non-Reliance:	As per Annex IS.
Agreements and Acknowledgements Regarding Hedging Activities:	As per Annex IS.
Additional Acknowledgements:	As per Annex IS.
Index Disclaimer:	As per Annex IS.
Optional Early Termination:	(i) As agreed by the parties from among the provisions in Annex IS, or (ii) in the case of AEJ Indices, inapplicable.
Break Funding Recovery:	If Optional Early Termination is applicable, as specified by the parties.
Break Fee:	As specified by the parties in the case of EMEA Indices.
Calculation Agent:	(i) As agreed by the parties, or (ii) in the case of AEJ Indices, per Annex IS unless otherwise agreed by the parties.

#### Equity Index Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	САТО
EUR	Euro	EUTA
GBP	Sterling	GBLO
HKD	Hong Kong Dollar	НКНК
JPY	Japanese Yen	JPTO
KRW	Korean Won	KRSE
SEK	Swedish Krona	SEST
USD	United States Dollars	USNY

#### Equity Index Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

#### Equity Index Available Indices

Abbr	Name
AEX	AEX Index (EMEA)
AMZX	Alerian MLP Index Total Return
AMZIXVWAP	Alerian MLP Infrastructure Index Total Return VWAP
AS51	S&P/ASX 200 (AEJ)
BEL20	BEL20 Index (EMEA)
CAC	Cotation Assistée en Continu 40 (EMEA)

DAX	Deutscher Aktien Index (EMEA)
DJITR	Dow Jones Industrial Average Total Return
DJUSRE	Dow Jones U.S. Real Estate Index
EWTRGSPC	REUTERS – REU - S&P EW 500 INDEX
FTSEMIB	FTSE MIB Index (EMEA)
GCUDCA	MSCI Daily TR Gross Small Cap Canada USD
GCUDUS	MSCI Daily Total Return Gross Small Cap USA USD
GDDLCA	MSCI Canada Index CAD Total Return (Gross Dividends)
GDDUCA	MSCI Canada Index USD Daily Total Return (Gross Dividends)
GDDUEAFE	MSCI EAFE Index Total Return (Gross Dividends)
GDDUNA	MSCI North American Index USD Total Return (Gross Dividends)
GDDUUS	MSCI US Index Total Return (Gross Dividends)
HSCEI	Hang Seng China Enterprises Index (AEJ)
HSI	Hang Seng Index (AEJ)
IBEX	IBEX 35 Index(EMEA)
IBOV	BOVESPA Index
IXBTR	S&P 500 Material Select Sector Total Return
IXCPR	Communication Services Select Sector Index
IXCTR	Communication Services Select Sector Index Communication Services Select Sector Index TR
IXETR	S&P 500 Energy Select Sector Total Return
IXITR	S&P 500 Energy Select Sector Total Return
IXMTR	S&P 500 Financials Select Sector Total Return
IXRTR	S&P 500 Consumer Staples Select Sector Total Return
IXTTR	S&P 500 Technology Select Sector Total Return S&P 500 Utilities Select Sector Total Return
IXUTR	
IXVTR	S&P 500 Health Care Select Sector Total Return
IXYTR	S&P 500 Consumer Discretionary Select Sector Total Return
KOSPI	Korea Composite Stock Price Index (AEJ)
MICNA	MSCI China A Inclusion USD Index (Net)
MEXBOL	Mexican IPC Index (Indice de Precios y Cotizaciones)
MSLUELAN	MSCI Emerging Markets Latin America Small Cap Index (USD) (Net Dividends)
NDDLEAFE	MSCI Canada Index CAD Total Return (Net Dividends)
NDDUNA	MSCI EAFE Net Total Return USD Index
NDDUNA	MSCI North American Index USD Total Return (Net Dividends)
NDDUUS	MSCI US Index Total Return (Net Dividends)
NDDUJN	MSCI Japan Index Total Return (Net Dividends)
NDEUMXF	MSCI Mexico Index USD Total Return (Net Dividends)
NDEUSCH	MSCI Chile Index Total Return (Net Dividends)
NDEUSDD	MSCI Colombia Index Total Return (Net Dividends)
NDEUSPR	MSCI Peru Index Total Return (Net Dividends)
NDUEBRAF	MSCI Brazil Index USD Total Return (Net Dividends)
NDUEEGFL	MSCI Emerging Markets Latin America USD
NDX NKV	NASDAQ-100 Nikkei 225 Index (AEJ)
NKY	
OEXT	S&P 100 Total Return
OMX RGUSFL	OMX Stockholm 30 (EMEA)
	Russell 1000 Financial
RU10GRTR	Russell 1000 Growth Total Return
RU10INTR	Russell 1000 Total Return
RU10VATR	Russell 1000 Value Total Return
RU20GRTR	Russell 2000 Growth Total Return
RU20INTR	Russell 2000 Total Return
RU20VATR	Russell 2000 Value Total Return

SP5LVIT	S&P 500 Low Volatility Total Return Index
SPSIBITR	S&P Biotechnology Select Industry Total Return Index
SPSIOP	S&P Oil & Gas Exploration & Production Select Industry Index
SPTRCOND	S&P 500 Consumer Discretionary Sector Total Return Index
SPTRCONS	S&P 500 Consumer Staples Sector Total Return Index
SPTRENRS	S&P 500 Energy Sector Total Return Index
SPTRFINL	S&P 500 Financials Sector Total Return Index
SPTRHLTH	S&P 500 Health Care Sector Total Return Index
SPTRINDU	S&P 500 Industrials Sector Total Return Index
SPTRMATR	S&P 500 Materials Sector Total Return Index
SPTRMDCP	S&P MidCap 400 Total Return
SPTRRLST	S&P 500 Real Estate Sector Total Return Index
SPTRSMCP	S&P SmallCap 600 Total Return
SPTRSVX	S&P 500 Value Total Return Index
SPTRUTIL	S&P 500 Utilities Sector Total Return Index
SPXT	S&P 500 Total Return
SX5E	Eurostoxx 50 Index (EMEA)
TSX69	S&P/TSX 60 Index
UKX	FTSE 100 Index (EMEA)
XNDX	NASDAQ-100 Total Return
XSOX	PHLX Semiconductor Sector Index Total Return

#### Equity Index Available FX Rates

Currency Pair	Available FX Rates
KRW/USD	BB: The rate implied by sourcing the Index on
	Bloomberg via "KOSPI>USD>GO"
	ISDA: The rate determined in accordance with the AEJ
	Source

#### Equity Index Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

### Equity Index Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termination
	Date		Date	Date
N/A	N/A	N/A	N/A	N/A

#### Equity Index Notional Amounts

Currency	Minimum	Increment	Maximum	Default
USD	10,000,000	1,000,000	N/A	N/A

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-AONIA-OIS-COMPOUND- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-AUBBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-annual Swap Rate- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-Annual Swap Rate- ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Swap Rate-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-CDOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-CORRA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν

### Equity Index Floating Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-Annual Swap Rate-10:00- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-10:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap-Index	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Act/365	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Act/365- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate- 11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TMM-CDC-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP USD-Basis Swaps-11:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-SONIA-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-RONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIBOR-ATHIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIMID-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIMID-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HIBOR=	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HKAB	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HKAB-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HONIX-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-ISDA-Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-ISDA-Swap Rate-4:00	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly-Annual Swap	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Rate-11:00-BGCANTOR				
HKD-Quarterly-Annual Swap Rate-4:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
JPY-BBSF-Bloomberg-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-BBSF-Bloomberg-15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-ISDA-Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-ISDA-Swap Rate-15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL-TONAR	All quoted tenors	N/A	Per ISDA 2006	N
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (All Banks)- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TONA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Reuters-15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Telerate-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Telerate-15:00	All quoted tenors	N/A	Per ISDA 2006	N
KRW-CD-3220	All quoted tenors	N/A	Per ISDA 2006	N
KRW-CD-KSDA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
KRW-Quarterly Annual Swap Rate-3:30-ICAP	3М	N/A	Per ISDA 2006	N
KRW-Bond-3222	3M	N/A	Per ISDA 2006	N
SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	N
SEK-SIOR-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
SEK-STIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
SEK-STIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	N
SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	N
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reference Banks- ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds-H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-11:00-LON-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-11:00-NY-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-3:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-3:00-NY-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	N
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	N
USD-SOFR-Compound	N/A	N/A	N/A	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-TBILL-H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
USD-TBILL-Secondary Market	All quoted tenors	N/A	Per ISDA 2006	N
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
USD-TIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate-T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate-T500	All quoted tenors	N/A	Per ISDA 2006	N

### Equity Index Requirements and Defaults

Date	Requirement	Default
Effective Date Business Day		No Adjustment
Convention		
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation		longer than the actual Calculation
_		Period length

# Equity Index Variance Swaps

Summary/Contract Description:	This covers equity index variance swaps (each, an "Equity Index Variance Swap"). An Equity Index Variance Swap is a product used to hedge or take a direct view on the volatility of an underlying equity index by paying or receiving an amount based on the difference between the actual realized variance of an index over the life of the contract and the variance strike price agreed at contract inception.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Equity
ISDA OTC Base Product:	Swap
ISDA OTC Sub-Product:	Parameter Return Variance
ISDA OTC Transaction type:	Single Index
Available Underlying Indices:	The index specified by the parties from among the indices listed in the table below titled "Equity Index Variance Swap Available Indices."
Contract Size:	The contracts are quoted in "Vega" amounts. The minimum contract size is 1,000 of the currency of which the underlying index settles in.
Quoting Convention:	The contracts are quoted in volatility percentage points.
Leg Conventions:	Floating Leg Rate – The realized variance rate that is calculated on the Expiration Date.
	Fixed Leg Rate – The agreed fixed rate of variance (Traded Price).
Tenor:	Tenors of any duration greater than 0 years and less than 50 years.
Trade Types:	Capped – the maximum payout of the contract is capped at an agreed price.
	Uncapped – there is no maximum payout on the contract.
Trade Start Types:	Immediate – the observation period of the contract begins on the Trade Date.
	Forward – the observation period of the contract begins on an agreed-upon date after the Trade Date.
Trade Date:	The date on which the contract is entered into.
Observation Start Date:	The Trade Date or, in the case of a forward starting transaction, an agreed-upon date after the Trade Date.
Valuation Date:	The date upon which the final rate of volatility will be calculated on using the "Applicable Formula" below.
Settlement:	The contracts are cash settled. If the difference between the realized variance and the "Variance Strike" (as agreed by the parties) is positive the seller pays the

	difference to the buyer. If the difference between the realized variance and the Variance Strike is negative the buyer pays the difference to the seller.
	Settlement of the contract occurs after the Valuation Date and in line with the settlement convention of the underlying equity index.
Settlement Payments/Payment Date:	T+2 (adjustments according to following business day convention).
Minimum Price or Incremental Price:	The contracts are quoted in volatility percentage points. There is no minimum price or minimum incremental price for the contract.
Payment Frequency:	One time.
Payment Exchange:	The buyer of a variance swap pays a fixed rate (the Variance Strike) in exchange for a payout based on the daily realized variance.
	The seller of a variance swap receives a fixed rate (the Variance Strike) in exchange for a payout based on the daily realized variance.
Day Count:	Business Days Per Year = 252
Business Day Convention:	Following business day convention.
Applicable Formula:	The final realized rate of variance will be calculated using the following formula:
	$100x\sqrt{\frac{252 \times \sum_{i=1}^{n} (\text{Return(i)})^2}{N}}$
	Where:
	$Return(i) = ln(\frac{Index_i}{Index_{i-1}})$
	n = the number of observations excluding the initial observation on the Observation Start Date, but including the Valuation Date;
	i = the relevant observation day;
	Index <sub>i</sub> = the closing level of the underlying index "i" business days from the Observation Start Date, except for (i) Index <sub>0</sub> which shall equal the initial index level, and (ii) Index <sub>n</sub> which shall equal the closing level of the underlying index on the Valuation Date. Index <sub>i-1</sub> will be modified by deducting the dividend in case it is an ex- date.
	If applicable, the volatility cap will be set at 2.5x the Volatility Strike.
	N = Expected number of observations as agreed by the parties.

	ln = the natural logarithm.
Market Disruption:	As specified by the parties.

### Equity Index Variance Swap Available Indices

Abbr	Name
DAX	Deutscher Aktien Index
DJITR	Dow Jones Industrial Average Total Return
DJUSRE	Dow Jones U.S. Real Estate Index
FTXIN25	FTSE China 50 Index
GDDLCA	MSCI Canada Index CAD Total Return (Gross Dividends)
GDDUEAFE	MSCI EAFE Index Total Return (Gross Dividends)
GDDUNA	MSCI North American Index USD Total Return (Gross Dividends)
GDDUUS	MSCI US Index Total Return (Gross Dividends)
HSCEI	Hang Seng China Enterprises Index
HSI	Hang Seng Index
IBOV	BOVESPA Index
KOSPI	Korea Composite Stock Price Index
MDCPSPTR	S&P MidCap 400 Total Return
MEXBOL	Mexican IPC index (Indice de Precios y Cotizaciones)
NDDLCA	MSCI Canada Index CAD Total Return (Net Dividends)
NDDUNA	MSCI North American Index USD Total Return (Net Dividends)
NDDUUS	MSCI US Index Total Return (Net Dividends)
NDEUBRAF	MSCI Brazil Index USD Total Return (Net Dividends)
NDEUMXF	MSCI Mexico Index USD Total Return (Net Dividends)
NDEUSCH	MSCI Chile Index Total Return (Net Dividends)
NDEUSCO	MSCI Colombia Index Total Return (Net Dividends)
NDUEEGF	MSCI Emerging Markets Index
NDUEEGFL	MSCI Emerging Markets Latin America USD
NDX	NASDAQ-100
OEXT	S&P 100 Total Return
RGUSFL	Russell 1000 Financial
RU10GRTR	Russell 1000 Growth Total Return
RU10INTR	Russell 1000 Total Return
RU10VATR	Russell 1000 Value Total Return
RU20GRTR	Russell 2000 Growth Total Return
RU20INTR	Russell 2000 Total Return
RU20VATR	Russell 2000 Value Total Return
SMCPSPTR	S&P SmallCap 600 Total Return
SPXT	S&P 500 Total Return
SX5E	Eurostoxx 50 Index
UKX	FTSE 100 Index

# Equity Index Volatility Swaps

Summary:	This covers equity index volatility swaps (each, an "Equity Index Volatility Swap").
Limitations on Available Selections and Default Settings:	<ul> <li>"Equity Index Volatility Swap").</li> <li>The terms under which an Equity Index Volatility Swap may be traded are shown below or in the attached tables. For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</li> <li>For Business Days, the defaults shall be the locations specified for the relevant currency.</li> <li>The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location. In many cases there are normal "vanilla" terms on which the parties will transact.</li> <li>These are shown as "Default " and will apply unless the parties vary them.</li> <li>It should be noted that these contracts can be traded in a variety of currencies.</li> </ul>
	<ul><li>"Available Terms" and/or "Default Terms" may vary by currency.</li><li>In some cases, the same contract might have different terms depending on the market in which it is traded (<i>e.g.</i>, London versus NY).</li></ul>
Incorporated Standards:	In that case the default settings may vary by market.This contract description incorporates by reference the following industry standard documentation and standards:(a) 2006 ISDA Definitions(b) 2002 ISDA Equity Derivatives Definitions(c) Annex IVS to:(i) the 2006 Japan Master Variance Swap Confirmation Agreement for Japan Indices, (ii) the 2007 Americas Master Variance Swap Confirmation Agreement, (iii) the Revised 2007 AEJ Master Variance Swap Confirmation Agreement for AEJ indices, or (iv) 

Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Equity	
ISDA OTC Base Product:	Swap	
ISDA OTC Sub-Product:	Parameter Return Volatility	
ISDA OTC Transaction Type:	Single Index	
Further Limitations:	None.	
Terms:		
Trade Date:	As agreed by the parties.	
Effective Date ("effectiveDate"):	As per Annex IVS (other than for a Japan Index).	
Termination Date ("terminationDate"):	As per Annex IVS.	
Exchanges:	As specified by the parties.	
Related Exchanges:	As per Annex IVS.	
Volatility Buyer:	Not applicable.	
Volatility Seller:	Not applicable.	
Volatility Cap:	If applicable, as specified by the parties.	
Index:	As specified by the parties from among the Equity Index	
index.	Volatility Swap – Available Indices (see below).	
Equity Amounts:		
Equity Amount Payer ("payerPartyReference"):	The Volatility Seller.	
Equity Notional Amount:	As specified by the parties (other than for an EMEA	
	Index).	
Equity Notional Reset:	As per Annex IVS.	
Type of Return:	As per Annex IVS.	
Initial Price:	As per Annex IVS.	
Final Price:	As per Annex IVS.	
Valuation Time:	As per Annex IVS.	
Observation Start Date:	As specified by the parties or otherwise as per Annex	
	IVS.	
Observation End Date:	As per Annex IVS.	
Observation Day:	As per Annex IVS (with Disrupted Date being	
	determined, in the case of a Japan Index, in accordance	
	with the Japan Index Market Practice Statement).	
Non-Disrupted Observation Day:	As per Annex IVS.	
Observation Period:	As per Annex IVS.	
Futures Price Valuation:	As specified by the parties or determined in accordance	
	with Annex IVS.	
Default Exchange-traded Contract:	As per Annex IVS.	
Equity Amount:	The product of the Equity Notional Amount and the	
	Final Realized Volatility (or, if there is a Volatility Cap,	
	the lesser of the Realized Volatility or the Volatility	
	Cap).	
Variance Strike Price:	Not applicable.	
Variance Cap:	Not applicable.	
Final Realized Volatility:	As per Annex IVS.	
Initial Index Level:	As specified by the parties.	
Closing Index Level:	If specified by the parties, and determined per Annex	
	IVS.	
Expiring Contract Level:	If specified by the parties or as determined per Annex	
	IVS.	
Variance Amount:	Not applicable.	
Volatility Strike Price:	Not applicable.	
Variance Strike Price:	Not applicable.	
Variance Cap Amount:	Not applicable.	
Final Realized Volatility ("FRV"):	Per Annex IVS.	

N:	As specified by the parties or otherwise per Annex IVS	
	(other than for an AEJ Index).	
Expected N:	As specified by the parties or otherwise per Annex IVS	
	(only for an AEJ Index).	
Market Disruption Event:	As per Annex IVS.	
Fixed Amount:		
Fixed Amount Payer:	The Volatility Buyer.	
Fixed Amount:	The product of the Equity Notional Amount and the	
	Volatility Strike.	
Volatility Strike:	As specified by the parties.	
Settlement Terms:		
Cash Settlement:	As per Annex IVS.	
Settlement Currency:	As per Annex IVS.	
Cash Settlement Payment Date:	As per Annex IVS.	
Index Adjustment Events:		
Index Cancellation:	As per Annex IVS.	
Index Modification:	As per Annex IVS.	
Index Disruption:	As per Annex IVS.	
IVS Cancellation and Payment:	As per Annex IVS.	
Additional Disruption Events:		
Change in Law:	As per Annex IVS.	
Non-Reliance:	As per Annex IVS.	
Agreements and Acknowledgements Regarding Hedging	As per Annex IVS.	
Activities:		
Additional Acknowledgements:	As per Annex IVS.	
Index Disclaimer:	As per Annex IVS.	
Calculation Agent:	As agreed by the parties.	

## Equity Index Volatility Swap - Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY

#### Equity Index Volatility Swap - Available Indices

Abbr	Name
SPX	S&P 500 Index
SPXT	S&P 500 Total Return

# Fixed for Floating Agricultural Swaptions

This covers uncleared fixed for floating agricultural	
swaptions ("Fixed for Floating Agricultural Swaptions").	
The terms under which Fixed for Floating Agricultural	
Swaptions may be traded are shown below and in the	
attached tables.	
This contract description incorporates by reference the	
following industry standard documentation and	
standards:	
2005 ISDA Commodity Derivatives Definitions	
("Commodity Definitions")	
Commodito	
Commodity	
Agricultural	
Cash	
None	
As agreed by the parties.	
As specified by the parties from among the Available	
Option Styles.	
Swaption	
As specified by the parties.	
As specified by the parties.	
As specified by the parties.	
As specified by the parties, subject to adjustment in	
accordance with the Business Day Convention.	
Per the Available Currencies, plus such additional	
Business Days as the parties specify.	
As specified by the parties from among the Available	
Business Day Conventions or otherwise per the	
Commodity Definitions.	
Applicable	
For an American Option, the period of days and the	
times on such days specified by the parties.	
For any other Option Style, the times on the Expiration	
Date or Potential Exercise Date specified by the parties.	
For a Bermuda Option, the days specified by the parties.	
As specified by the parties.	
As specified by the parties.	
Applicable, unless otherwise specified by the parties.	
As specified by the parties.	
As specified by the Seller.	
waption Relates:	
As agreed by the parties.	
The date specified by the parties, adjusted in accordance	
with any applicable Business Day Convention.	
with any applicable Business Day Convention. None, unless specified by the parties.	
None, unless specified by the parties.	
None, unless specified by the parties.None, unless specified by the parties from among the	
None, unless specified by the parties.	

Termination Date Business Day Convention:	None, unless specified by the parties from among the Available Business Day Conventions.
Commeditor	
Commodity:	As specified by the parties from among the Available Commodities.
Total Notional Quantity:	The sum of the Notional Quantities per Calculation
	Period.
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period
	Basis.
Calculation Periods:	As specified by the parties.
Calculation Period Business Days:	None, unless specified by the parties.
Calculation Period Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Payment Dates:	In relation to each Calculation Period, as specified by the parties, each such day being subject to adjustment in accordance with the Payment Date Business Day Convention.
Payment Date Business Days:	The Business Days specified for the relevant
5	Commodity, plus any additional Business Days specified
	by the parties from among the Available Business Days.
Payment Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Fixed Amount:	
Fixed Price Payer:	As specified by the parties.
Fixed Price or Fixed Amount:	As specified by the parties per Unit of the Commodity or overall.
Floating Amount:	
Floating Price Payer:	As specified by the parties.
Applicable Spread:	As specified by the parties.
Commodity Reference Price:	As specified by the parties from among the Available
	Commodity Reference Prices.
Market Disruption:	
Market Disruption Events:	Unless otherwise specified by the parties, per the
<u> </u>	Commodity Definitions.
Additional Market Disruption Events:	As specified by the parties.
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Disruption Fallbacks:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Fallback Reference Price:	None, unless specified by the parties.
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the
maximum Duys of Distuption.	Commodity Definitions.

Fixed for Floating Agricultural Swaptions Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY
EUR	Euro	EUTA
GBP	Sterling	GBLO

#### Fixed-for-Floating Agricultural Swaptions Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

Fixed-for-Floating Agricultural Swaptions Available Commodity Reference Prices

#### **ISDA Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

ISDA Definition		
COCOA-GBP-EURONEXT		
COCOA-NYBOT <sup>1</sup>		
COFFEE ARABICA-NYBOT <sup>1</sup>		
COFFEE ROBUSTA-EURONEXT		
CORN-CBOT		
COTTON NO. 2-NYBOT <sup>1</sup>		
FROZEN CONCENTRATED ORANGE JUICE NO. 1-NYBOT <sup>1</sup>		
LEAN HOGS-CME		
MILK-CLASS III-CME		
MILK-CLASS IV-CME		
SOYBEAN-CBOT		
SOYBEAN MEAL-CBOT		
SOYBEAN OIL-CBOT		
SUGAR #11 (WORLD)-NYBOT <sup>1</sup>		
WHEAT-CBOT		
WHEAT HRM-KCBOT		
WHITE SUGAR-EURONEXT		

<sup>&</sup>lt;sup>1</sup> The New York Board of Trade (NYBOT) was renamed ICE Futures US in 2007.

#### **Exchange Definitions**

The following Commodity Reference Prices are as defined in the Commodity Price Reference Framework in Sub-Annex A to the Commodity Definitions.

	ISDA Definition				
Commodity Reference Price	Relevant Commodity	Relevant Unit	Exchange	Currency	Specified Price
BUTTER-CME	Butter	Pound	CME Globex	USD 0.01	Settlement Price
CHEESE-CME	Cheese	Pound	CME Globex	USD 0.01	Settlement Price
CRUDE PALM OIL-CME	Crude Palm Oil	Metric Ton	CME Globex	USD 0.01	Settlement Price
DRY WHEY- CME	Dry Whey	Pound	CME Globex	USD 0.01	Settlement Price
HARD RED SPRING WHEAT- MGEX	Wheat	Bushel	Minneapolis Grain Exchange	USD 0.01	Settlement Price
MILLING WHEAT- EURONEXT	Wheat	Tonne	EURONEXT LIFFE	EUR 0.01	Settlement Price
NONFAT DRY MILK-CME	Non-Fat Dry Milk	Pound	CME Globex	USD 0.01	Settlement Price
RAPESEED- EURONEXT	Rapeseed	Tonne	EURONEXT LIFFE	EUR 0.01	Settlement Price

# Fixed for Floating Agricultural Swap Contracts

Summary:	This covers uncleared fixed-for-floating agricultural swaps ("Fixed for Floating Agricultural Swap Contracts").		
Limitations on Available Selections and Default Settings:	The terms under which Fixed for Floating Agricultural Swap Contracts may be traded are shown below and in the attached tables.		
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even		
	Increment and cannot exceed the Maximum; for a date,		
	the date cannot be earlier than Earliest nor later than		
	Latest.		
	In many cases there are normal "vanilla" terms on which the parties will transact.		
	These are shown as "Default " and will apply unless the		
	parties vary them.		
Incorporated Standards:	This contract description incorporates by reference the		
	following industry standard documentation and		
	standards:		
	2005 ISDA Commodity Derivatives Definitions ("Commodity Definitions")		
Product Type/ISDA OTC Taxonomy:	( commonly Deminions )		
ISDA OTC Asset Class:	Commodity		
ISDA OTC Base Product:	Agricultural		
ISDA OTC Settlement type:	Cash		
Further Limitations:	None		
Terms:			
Trade Date:	As agreed by the parties.		
Effective Date:	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention.		
Effective Date Business Days:	None, unless specified by the parties.		
Effective Date Business Day Convention:	None, unless specified by the parties from among the Available Business Day Conventions.		
Termination Date:	As specified by the parties.		
Termination Date Business Days:	None, unless specified by the parties.		
Termination Date Business Day Convention:	None, unless specified by the parties from among the		
0	Available Business Day Conventions.		
Commodity:	As specified by the parties from among the Available Commodities.		
Total Notional Quantity:	The sum of the Notional Quantities per Calculation		
Total Notional Quantity.	Period.		
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period Basis.		
Calculation Periods:	As specified by the parties.		
Calculation Period Business Days:	None, unless specified by the parties.		
Calculation Period Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.		
Payment Dates:	In relation to each Calculation Period, as specified by the parties, each such day being subject to adjustment in accordance with the Payment Date Business Day Convention.		

Payment Date Business Days:	The Business Days specified for the relevant	
	Commodity, plus any additional Business Days specified	
	by the parties from among the Available Business Days.	
Payment Date Business Day Convention:	As specified by the parties from among the Available	
	Business Day Conventions.	
Fixed Amount:		
Fixed Price Payer:	As specified by the parties.	
Fixed Price or Fixed Amount:	As specified by the parties per Unit of the Commodity or overall.	
Floating Amount:		
Floating Price Payer:	As specified by the parties.	
Applicable Spread:	As specified by the parties.	
Commodity Reference Price:	As specified by the parties from among the Available	
	Commodity Reference Prices.	
Market Disruption:		
Market Disruption Events:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Additional Market Disruption Events:	As specified by the parties.	
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Disruption Fallbacks:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Fallback Reference Price:	None, unless specified by the parties.	
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Calculation Agent:	As agreed by the parties.	

#### Fixed-for-Floating Agricultural Swap Available Currencies and Required Business Days

Three Letter Currency Code	Currency Name (ISDA)	Basic Business Day Locations
(ISDA/ISO)		For Currency (FpML Codes)
USD	United States Dollars	USNY
EUR	Euro	EUTA
GBP	Sterling	GBLO

#### Fixed-for-Floating Agricultural Swap Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

Fixed-for-Floating Agricultural Swap Available Commodity Reference Prices

#### **ISDA Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

	ISDA Definition	
COCOA-GBP-EURONEXT		

COCOA-NYBOT <sup>1</sup>
COFFEE ARABICA-NYBOT <sup>1</sup>
COFFEE ROBUSTA-EURONEXT
CORN-CBOT
COTTON NO. 2-NYBOT <sup>1</sup>
FROZEN CONCENTRATED ORANGE JUICE NO. 1-NYBOT <sup>1</sup>
LEAN HOGS-CME
MILK-CLASS III-CME
MILK-CLASS IV-CME
SOYBEAN-CBOT
SOYBEAN MEAL-CBOT
SOYBEAN OIL-CBOT
SUGAR #11 (WORLD)-NYBOT <sup>1</sup>
WHEAT-CBOT
WHEAT HRM-KCBOT
WHITE SUGAR-EURONEXT

#### **Exchange Definitions**

The following Commodity Reference Prices are as defined in the Commodity Price Reference Framework in Sub-Annex A to the Commodity Definitions.

ISDA Definition					
Commodity	Relevant	<b>Relevant Unit</b>	Exchange	Currency	Specified Price
Reference	Commodity				
Price					
BUTTER-CME	Butter	Pound	CME Globex	USD 0.01	Settlement Price
CHEESE-CME	Cheese	Pound	CME Globex	USD 0.01	Settlement Price
CRUDE PALM	Crude Palm Oil	Metric Ton	CME Globex	USD 0.01	Settlement Price
OIL-CME					
DRY WHEY-	Dry Whey	Pound	CME Globex	USD 0.01	Settlement Price
CME					
HARD RED	Wheat	Bushel	Minneapolis	USD 0.01	Settlement Price
SPRING			Grain Exchange		
WHEAT-					
MGEX					
MILLING	Wheat	Tonne	EURONEXT	EUR 0.01	Settlement Price
WHEAT-			LIFFE		
EURONEXT					
NONFAT DRY	Non-Fat Dry	Pound	CME Globex	USD 0.01	Settlement Price
MILK-CME	Milk				
RAPESEED-	Rapeseed	Tonne	EURONEXT	EUR 0.01	Settlement Price
EURONEXT			LIFFE		

<sup>&</sup>lt;sup>1</sup> The New York Board of Trade (NYBOT) was renamed ICE Futures US in 2007.

# **Fixed for Floating Interest Rate Swaps**

Summary:	This covers uncleared fixed for floating interest rate swaps ("Fixed for Floating Interest Rate Swap (Uncleared)").
Limitations on Available Selections and Default Settings:	The terms under which a Fixed for Floating Interest Rate Swap (Uncleared) contract may be traded are as specified in these terms and conditions or in the attached tables.
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made. For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.
	In some cases, the same contract might have different terms depending on the market in which it is traded (e.g., London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	<ul> <li>This contract description incorporates by reference the following industry standard documentation and standards:</li> <li>(a) 2006 ISDA Definitions</li> <li>(b) ISDA Settlement Matrix (if Optional Early Termination applies)</li> <li>(c) ISDA OTC Taxonomies</li> <li>(d) FpML Location Codes</li> </ul>
	For convenience, certain terms are mapped to their FpML 5.5 equivalent.

Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Fixed Floating
Further Limitations:	None
Terms:	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Effective Date as a number of Business Days or Banking Days from the Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Termination Date as a number of days, months or years from the Effective Date ("relativeTerminationDate").
Termination Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Fixed Amount:	
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Fixed Rate Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
Fixed Rate Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
Day Count Fraction:	As specified by the parties.
Period End Dates Business Days:	As specified by the parties from among the Available Business Days.
Period End Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
initial Floating Rate:	As specified by the parties.
Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
Designated Maturity ('indexTenor''):	As specified by the parties.
Linear Interpolation:	For the Calculation Periods specified by the parties.
Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation

	applies, as specified by the parties.
Longer Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation
	applies, as specified by the parties.
Spread:	As specified by the parties.
Day Count Fraction:	As specified by the parties.
Reset Dates ("resetDate"):	As specified by the parties.
Method of Averaging:	As specified by the parties.
Compounding:	As specified by the parties.
Compounding Dates:	In the event Compounding is selected, as selected by the
	parties.
Compounding Method (Compounding OR Flat	In the event Compounding is selected, as selected by the
Compounding):	parties.
Period End Dates Business Days:	As specified by the parties from among the Available
·	Business Days.
Period End Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Payment Dates Business Days:	As specified by the parties from among the Available
	Business Days, subject to any Required Business Days.
Payment Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Reset Dates Business Days:	As specified by the parties from among the Available
	Business Days, subject to any Required Business Days.
Reset Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Mark-to-Market Currency Swap:	
Mark-to-Market Currency Swap:	As specified by the parties, if the Currency Amounts are in different Currencies.
Variable Currency Payer:	As specified by the parties if the transaction is a Mark- to-Market Currency Swap.
Constant Currency Payer:	As specified by the parties if the transaction is a Mark- to-Market Currency Swap.
Currency Exchange Rate:	As specified by the parties if the transaction is a Mark- to-Market Currency Swap and ISDA MTM Matrix is not applicable.
ISDA MTM Matrix:	As specified by the parties if the transaction is a Mark- to-Market Currency Swap.
Initial Exchange:	
Initial Exchange Date:	As specified by the parties.
Fixed Rate Payer Initial Exchange Amount:	As specified by the parties.
Floating Payer Initial Exchange Amount:	As specified by the parties.
Currency:	As specified from the parties from the Available
	Currencies.
Interim Exchanges:	
Interim Exchange Dates:	As specified by the parties.
Fixed Rate Payer Interim Exchange Amount:	As specified by the parties.
Fixed Rate Payer Interim Exchange Amount:	As specified by the parties.
Currency:	As specified from the parties from the Available Currencies.
Final Exchange:	
Final Exchange Date:	As specified by the parties.
Fixed Rate Payer Final Exchange Amount:	As specified by the parties.
Fixed Payer Final Exchange Amount:	As specified by the parties.
Currency:	As specified from the parties from the Available Currencies.

<b>Optional Early Termination:</b>	
Optional Early Termination:	As specified by the parties.
Option Style:	As specified by the parties.
Optional Early Termination Date:	As specified by the parties.
Seller:	As specified by the parties if only one party can terminate.
Buyer:	As specified by the parties, if only one party can terminate.
Seller's Agent:	As specified by the parties, if only one party can terminate.
Business Days for Payments:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Exercise Business Days:	As specified by the parties.
<b>Optional Early Termination Procedure for Exercise:</b>	
Commencement Date:	As specified by the parties, if the Option Style is American.
Bermuda Option Exercise Dates:	As specified by the parties, if the Option Style is Bermuda.
Expiration Date:	As specified by the parties.
Expiration Time:	As specified by the parties.
Earliest Exercise Time:	As specified by the parties.
Latest Exercise Time:	As specified by the parties.
Exercise Business Day:	As specified by the parties.
Partial Exercise:	As specified by the parties, if Option Style is European.
Multiple Exercise:	As specified by the parties, if Option Style is American or Bermuda.
Minimum Notional Amount:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
Maximum Notional Amount:	As specified by the parties if Multiple Exercise is specified.
Integral Multiple:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
<b>Optional Early Termination Settlement Terms:</b>	
Cash Settlement:	As specified by the parties.
ISDA Settlement Matrix:	As specified by the parties, if Cash Settlement is applicable to a single currency Transaction.
ISDA Cross Currency Settlement Matrix:	As specified by the parties, if Cash Settlement is applicable to a cross currency Transaction whose currencies are listed as a "currency pair" in the Cross Currency Settlement Matrix.
Cash Settlement Valuation Time:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Valuation Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Valuation Business Days:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date Business Days	If Cash Settlement is applicable, as specified by the
Convention:	parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or

	"Cash Price—Alternate" apply, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield Curve— Adjusted," "Par Yield Curve—Unadjusted" or "Zero Coupon Curve—Adjusted" apply, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Cash Settlement Reference Banks:	As specified by the parties, if Settlement Rate is applicable.
Cash Settlement Reference Banks:	If Cash Settlement is applicable, as specified by the parties.
Quotation Rate:	If Cash Settlement is applicable, as specified by the parties from among the Available Quotation Rates.
Calculation Agent:	As agreed by the parties.

# Fixed Floating Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
BRL	Brazilian Reai	Any of BR{SP,RJ,BR} and not
		otherwise declared a market
		holiday by the BM&F
CAD	Canadian Dollar	САТО
CHF	Swiss Franc	CHZU
CLP	Chilean Peso	CLSA
CNH	Chinese Renminbi (HK)	HKHK and CNBE
CNY	Chinese Renminbi	CNBE
СОР	Colombian Peso	СОВО
CZK	Czech Koruna	CZPR
DKK	Danish Krone	DKCO
EUR	Euro	EUTA
GBP	Sterling	GBLO
HKD	Hong Kong Dollar	НКНК
HUF	Hungarian Forint	HUBU
ILS	Israeli Shekel	ILTA
INR	Indian Rupee	INMU
JPY	Japanese Yen	JPTO
KRW	Korean Won	KRSE
MXN	Mexican Peso (New)	MXMC
MYR	Malaysian Ringgit	MYKL
NOK	Norwegian Krone	NOOS
NZD	New Zealand Dollar	NZAU and NZWE
PHP	Phillipine Peso	PHMA
PLN	Polish Zloty	PLWA
RON	Romanian Leu	ROBU
RUB	Russian Ruble	RUMO
SAR	Saudi Arabian Riyal	SARI
SEK	Swedish Krona	SEST
SGD	Singapore Dollar	SGSI
THB	Thai Baht	THBA

TRY	Turkish Lira	TRIS
TWD	Taiwan Dollar	TWTA
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

### Fixed Floating Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

#### Fixed Floating Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

### Fixed Floating Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP	Plus Two Banking Days
CAD, GBP	Plus Zero

#### Fixed Floating Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective	Earliest Termination	Latest Termination
	Date	Date	Date	Date
N/A	N/A	N/A	N/A	N/A

Fixed Floating Notional Amounts

Currency	Minimum	Increment	Maximum	Default
AUD	25,000,000	100,000	N/A	N/A
BRL	5,000,000	100,000	N/A	N/A
CAD	25,000,000	1,000,000	N/A	N/A
CHF	5,000,000	100,000	N/A	N/A
CLP	5,000,000	100,000	N/A	N/A
CNH	5,000,000	100,000	N/A	N/A
CNY	5,000,000	100,000	N/A	N/A
COP	5,000,000	100,000	N/A	N/A
CZK	5,000,000	100,000	N/A	N/A
DKK	5,000,000	100,000	N/A	N/A
EUR	25,000,000	100,000	N/A	N/A
GBP	25,000,000	100,000	N/A	N/A
HKD	25,000,000	100,000	N/A	N/A
HUF	5,000,000	100,000	N/A	N/A
ILS	5,000,000	100,000	N/A	N/A

INR	5,000,000	100,000	N/A	N/A
JPY	2,500,000,000	100,000,000	N/A	N/A
KRW	5,000,000	100,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
MYR	5,000,000	100,000	N/A	N/A
NOK	5,000,000	100,000	N/A	N/A
NZD	5,000,000	100,000	N/A	N/A
PHP	5,000,000	100,000	N/A	N/A
PLN	5,000,000	100,000	N/A	N/A
RON	5,000,000	100,000	N/A	N/A
RUB	5,000,000	100,000	N/A	N/A
SAR	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
SGD	5,000,000	100,000	N/A	N/A
THB	5,000,000	100,000	N/A	N/A
TRY	5,000,000	100,000	N/A	N/A
TWD	5,000,000	100,000	N/A	N/A
USD	25,000,000	1,000,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

# Fixed Floating Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-AONIA-OIS- COMPOUND- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-AUBBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Quarterly Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Semi-annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-Annual Swap Rate-ICAP-	All quoted tenors	N/A	Per ISDA 2006	Ν

Reference Banks				
AUD-Swap Rate- Reuters	All quoted tenors	N/A	Per ISDA 2006	N
BRL-CDI-CETIP	See below	N/A	See below	See below
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-CDOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-CORRA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-ISDAFIX-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
CHF-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
CHF-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-TOIS-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν

All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
	All quoted tenors         All quoted tenors <t< td=""><td>All quoted tenorsN/AAll quote</td><td>All quoted tenorsN/APer ISDA 2006All quoted tenorsN/A</td></t<>	All quoted tenorsN/AAll quote	All quoted tenorsN/APer ISDA 2006All quoted tenorsN/A

EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-LIBOR	All quoted tenors	N/A	Per ISDA 2006	N

All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
	All quoted tenorsAll quoted tenors	All quoted tenorsN/AAll quote	All quoted tenorsN/APer ISDA 2006All quoted tenorsN/A

All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
	All quoted tenorsAll quoted tenors	All quoted tenors       N/A         All quoted tenors	All quoted tenorsN/APer ISDA 2006All quoted tenorsN/A

JPY-ISDA-Swap Rate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL- TONAR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TONA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
KRW-CD-3220	All quoted tenors	N/A	Per ISDA 2006	N
KRW-CD-KSDA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	N
MXN-TIIE-Banxico- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν

MXN-TIIE-Banxico- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
MYR-KLIBOR-BNM	All quoted tenors	N/A	Per ISDA 2006	Ν
MYR-KLIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR-NIBR	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR-NIBR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-BID	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-FRA	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-NZIONA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PHP-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
PHP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PLN-WIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PLN-WIBOR-WIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
PLZ-WIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PLZ-WIBOR-WIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
RON-RBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
RUB-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
RUB-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
RUB-MOSPRIME- NFEA	All quoted tenors	N/A	Per ISDA 2006	Ν
RUB-MOSPRIME- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SAR-SRIOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SAR-SRIOR-SUAA	All quoted tenors	N/A	Per ISDA 2006	Ν

SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-SIOR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- VWAP-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
THB-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
THB-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
THB-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
THB-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
THB-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν

THB-THBFIX-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-TRYIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
TWD-Quarterly- Annual Swap Rate- 11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
TWD-Quarterly- Annual Swap Rate- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
TWD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
TWD-Reuters-6165	All quoted tenors	N/A	Per ISDA 2006	Ν
TWD-Telerate-6165	All quoted tenors	N/A	Per ISDA 2006	N
TWD-TWCPBA	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν

USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDA-Swap Rate- 3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-LON- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SOFR- COMPOUND	All quoted tenors	N/A	Prior to publication of a supplement to ISDA 2006 including USD- SOFR-COMPOUND, not applicable and thereafter, per ISDA 2006	No
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	N
	1			

All quoted tenors	N/A	Per ISDA 2006	N
		101100112000	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	N
All quoted tenors	N/A	Per ISDA 2006	N
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
All quoted tenors	N/A	Per ISDA 2006	Ν
	All quoted tenors	All quoted tenors       N/A         All quoted tenors       N/A	All quoted tenorsN/APer ISDA 2006All quoted tenorsN/APer ISDA 2006

## Definition of BRL Floating Rate Option

Floating Amount:	Notwithstanding anything to the contrary
FX	$Rate \times Currency Amount \times \left[\prod_{j=1}^{N} \left(1 + \frac{Relevant Rate_j}{252}\right) - 1\right]^{252/N}$ $Where:$
	Where:
	N=number of Reset Dates in the Calculation Period
	j=a particular Reset Date
	<i>Relevant Rate</i> =the Relevant Rate for instance <i>j</i> of Reset Date
BRL-CDI-CETIP:	For any Reset Date, the Overnight Brazilian Interbank Deposit
	Rate Annualized, known as the average ("Media") of the
	DIOVER- EXTRA Group as published by CETIP (Câmara de

BRL-CDI-Reference Dealers:	<i>Custódia e Liquidação</i> ) (the "Overnight CDI Rate") for such date; provided that (i) such rate is published not later than 12:00 p.m. on the Brazil Business Day next following such Reset Date and (ii) any adjustments made by CETIP to such rate at any time later than the end of the business day on such Reset Date shall not be taken into account. If for any Reset Date there is no published Overnight CDI Rate (including as a result of the proviso above), CDI for the relevant Reset Date will be the overnight deposit rate published for such date by the BM&F in accordance with its rules (see http://www.bmf.com.br/portal/pages/boletim1/bd_manual/indica doreFinanceiros1.asp, or any successor page). If the BM&F does not publish such a rate for such date, CDI for the relevant Reset Date shall be determined jointly by the parties. If the parties do not agree on a determination of such rate within one Brazil Business Day following the relevant Reset Date, CDI shall be determined through a CDI Reference Dealer Poll as described herein. If CDI for a Reset Date is not so determined by a CDI Reference Dealer Poll, BRL-CDI-Reference Dealers shall apply. If applicable for a Reset Date as set forth above, the Calculation Agent shall conduct up to four dealer polls commencing on the Brazil Business Day following the relevant Reset Date, in each case by requesting each of the CDI Reference Dealers to provide a quotation of the CDI. If at least four such quotations are obtained from CDI Reference Dealers in any such poll, the highest and lowest quotations will be disregarded and CDI for the relevant Reset Date will equal the arithmetic mean of the remaining quotations. If fewer than four such quotations are obtained from a poll, the Calculation Agent shall conduct additional such polls until four such quotations are obtained in any poll; provided that the Calculation Agent shall not conduct more than four polls in the
	If fewer than four such quotations are obtained from a poll, the Calculation Agent shall conduct additional such polls until four such quotations are obtained in any poll; provided that the
CDI Reference Dealers:	Dealer Poll. At least six and not more than eight leading onshore dealers in
Reset Dates ("resetDate"):	the CDI market selected by the Calculation Agent.Each Scheduled Reset Date (as defined in the BRL CDI Best
Reset Dates Business Days:	Practices). As specified by the parties from among the Available BR
Available BR Business Days:	Business Days. Any of BR{SP,RJ, BR} and not otherwise declared a financial market holiday by the BM&F.

#### Definition of USD-SOFR-COMPOUND

From and after the date on which ISDA publishes a supplement to ISDA 2006 containing a definition of USD-SOFR-COMPOUND, per ISDA 2006

#### Prior to such date:

"USD-SOFR-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is SOFR). Upon the occurrence of a USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the rate (inclusive of any spreads or adjustments) formally designated, nominated or recommended as the replacement for SOFR by the Federal Reserve Board or a committee officially endorsed or convened by the Federal Reserve Board for purposes of designating, nominating or recommending a replacement for SOFR (which rate may be produced by the Federal Reserve Bank of New York or another administrator). If no such rate is formally designated, nominated or recommended within one U.S. Government Securities Business Day of the USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to OBFR. If at the time of the USD-SOFR-COMPOUND Index Cessation Event, publication of OBFR has been permanently or indefinitely discontinued, it has been publicly announced that OBFR will be permanently or indefinitely discontinued as of a specific date or there has been a public statement by a regulator or other official sector entity prohibiting the use of OBFR (which statement applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions), then the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the FOMC Target Rate.

"USD-SOFR-COMPOUND" will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a):

$$\left[\prod_{i=1}^{d_{o}} \left(1 + \frac{\text{SOFR}_{i} \times n_{i}}{360}\right) \cdot 1\right] \times \frac{360}{d}$$

where:

" $d_0$ ", for any Calculation Period, is the number of U.S. Government Securities Business Days in the relevant Calculation Period;

"i" is a series of whole numbers from one to  $d_0$ , each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant Calculation Period;

"SOFR" is the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website;

"SOFR<sub>i</sub>", for any day "i" in the relevant Calculation Period, is a reference rate equal to SOFR in respect of that day as published on or about 8:00 a.m., New York City time, on the U.S. Government Securities Business Day immediately following that day "i". If, by 5:00 p.m., New York City time, on the U.S. Government Securities Business Day immediately following any day "i", SOFR in respect of such day "i" has not been published and a USD-SOFR-COMPOUND Index Cessation Event has not occurred, then SOFR<sub>i</sub> for that day "i" will be SOFR as published in respect of the first preceding U.S. Government Securities Business Day for which SOFR was published on the Federal Reserve's Website;

"ni" is the number of calendar days in the relevant Calculation Period on which the rate is SOFRi;

"d" is the number of calendar days in the relevant Calculation Period;

"USD-SOFR-COMPOUND Index Cessation Event" means the occurrence of one or more of the following events:

- (d) a public statement by the Federal Reserve Bank of New York (or a successor administrator of SOFR) announcing that it has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR;
- (e) the publication of information which reasonably confirms that the Federal Reserve Bank of New York (or a successor administrator of SOFR) has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR; or
- (f) a public statement by a regulator or other official sector entity prohibiting the use of SOFR that applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions;

"USD-SOFR-COMPOUND Index Cessation Effective Date" means, in respect of a USD-SOFR-COMPOUND Index Cessation Event, the date on which the Federal Reserve Bank of New York (or a successor administrator of SOFR) ceases to publish SOFR or the date as of which SOFR may no longer be used; and

"OBFR" is the daily Overnight Bank Funding Rate as provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website.

"FOMC Target Rate" is the short-term interest rate target set by the Federal Open Markets Committee and published on the Federal Reserve's Website or, if the Federal Open Markets Committee does not target a single rate, the midpoint of the short-term interest rate target range set by the Federal Open Markets Committee and published on the Federal Reserve's Website (calculated as the arithmetic average of the upper bound of the target range and the lower bound of the target range, rounded, if necessary, in accordance with the method set forth in Section 8.1(c))

"Federal Reserve's Website" means the website of the Board of Governors of the Federal Reserve System at <u>http://www.federalreserve.gov</u>, or any Successor Source.

Variable	Requirement	Default
Effective Date Business Day		No Adjustment
Convention:		
Termination Date Business Day		No Adjustment
Convention:		
Period End Dates:		Payment Dates
Payment Date Business Day		Modified Following
Convention:		
Linear Interpolation:		Applicable only to long or short stub
		periods
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation:		longer than the actual Calculation
		Period length
Compounding:		Inapplicable
Compounding Business Day	Same as Business Day Convention	
Convention:	for Period End Dates	

Fixed Floating Requirements and Defaults
(Excluding Optional Early Termination and Mandatory Early Termination)

Method of Averaging:	Weighted Average or Unweighted Average	Unweighted Average
Compounding Method:	Straight Compounding, Flat Compounding, Spread Exclusive Compounding	
ISDA MTM Matrix:		Applicable (to Mark-to-Market Cross Currency Swaps)
Initial Exchange Date:		Effective Date
Initial Exchange Date Business Day Convention:		Following
Interim Exchange Date Business Day Convention:		Modified Following
Final Exchange Date:		Termination Date
Final Exchange Date Business Day Convention:		Modified Following

Fixed Floating Requirements and Defaults (Optional Early Termination and Mandatory Early Termination)

Setting	Requirement	Default
Optional Early Termination:		Inapplicable
Mandatory Early Termination:		Inapplicable
Option Style:	American, Bermuda, European	
Cash Settlement:	Required for Mandatory Early	Applicable (i.e., Transaction is <b>not</b>
	Termination	"torn up for no value")
Optional Early Termination Date:		Cash Settlement Payment Date
Optional Early Termination Date		Following
Business Day Convention:		
Mandatory Early Termination Date		Modified Following
Business Day Convention		

Fixed Floating Requirements and Defaults (Optional Early Termination—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day:		Banking Day for cash Settlement
		Currency (TARGET Settlement Day
		for EUR)
Latest Exercise Time:	On Expiration Date, the Expiration	Other than Expiration Date, the
	Time	Expiration Time

# Fixed Floating Requirements and Defaults (Cash Settlement)

Setting	Requirement/Choices	Default
Cash Settlement Amount:		
ISDA Cross Currency Settlement		Applicable, if cross currency swap
Matrix:		with currency pair included in
		Matrix
ISDA Settlement Matrix:		Applicable, if single currency swap
		with Currency included in Matrix
Cash Settlement Valuation Time:		

	T
	Two Valuation Business Days
	before Mandatory/Optional Early
	Termination Date but same day for
	CAD, GBP or DKK with Floating
	Rate Option of "DKK-CIBOR-
	DKNA13" or "DKK-CIBOR-
	DKNA13-Bloomberg"
	Banking Days in locations per the
	Business Day Location Table, plus
	additional days required by for
	fixings under the Floating Rate
	Option(s)
	Following
	1 0110 millig
Cash Price	
Zero Coupoir Tield—Aujusted	East size also surrous and a second second
	For single currency, same as
	Notional Amount, otherwise as
	specified in ISDA Master
	Agreement, or otherwise same as
	Notional Amount for Fixed Amount
Source/Reference Banks	
	Fallbacks per ISDA 2006
	Definitions
bid	
ask	
mid	
Exercising Party Pays (Ontional	
Exclosing furty fuys (Optional	
	ask

Summary:	This covers fixed for floating interest rate swaptions
	("Fixed for Floating Interest Rate Swaptions").
Limitations on Available Selections and Default	The terms under which a Fixed for Floating Interest Rate
Settings:	Swaption may be traded are as specified in these terms
	and conditions and in the attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations
	specified for the relevant currency, any additional
	locations specified for the relevant Floating Rate
	Options.
	The parties may add additional locations from the
	Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made.
	For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which the parties will transport
	the parties will transact.
	These are shown as "Default " and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a
	variety of currencies.
	Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by
	currency.
	In some cases, the same contract might have different
	terms depending on the market in which it is traded ( <i>e.g.</i>
	London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the
incor por ateu Stanuarus.	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions
	(b) ISDA Settlement Matrix (if Optional Early
	Termination applies)
	(c) ISDA OTC Taxonomies
	(d) FpML Location Codes
	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Fixed Floating
Further Limitations:	None
Terms:	
Terms of "Underlying Swap Transaction":	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see
	below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance

## **<u>Fixed for Floating Interest Rate Swaptions</u>** Terms and Conditions

	with any applicable Business Day Convention.
	The parties may express the unadjusted Effective Date as
	a number of Business Days or Banking Days from the
	Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available
-	Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Termination
	Date as a number of days, months or years from the
Termination Data Pusiness Day Convention:	Effective Date ("relativeTerminationDate"). As specified by the parties from among the Available
Termination Date Business Day Convention:	Business Day Conventions.
Fixed Amount:	Business Day Conventions.
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Fixed Rate Period End Dates ("unadjustedCalculation	As specified by the parties.
Period Date"):	
first Period End Date:	As specified by the parties if there is a short initial
	Calculation Period.
Fixed Rate Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
Day Count Fraction:	As specified by the parties.
Period End Dates Business Days:	As specified by the parties from among the Available
	Business Days.
Period End Dates Business Day Convention:	As specified by the parties from among the Available
Dermont Dates Pusiness Dere	Business Day Conventions.
Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Payment Dates Business Day Convention:	As specified by the parties from among the Available
r dynent Dues Dusness Day Convention.	Business Day Conventions.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Period End Dates ("unadjustedCalculation Period	As specified by the parties.
Date"):	
first Period End Date:	As specified by the parties if there is a short initial
	Calculation Period.
Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
initial Floating Rate:	As specified by the parties.
Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
Designated Maturity ('indexTenor")	As specified by the parties.
Linear Interpolation:	For the Calculation Periods specified by the parties.
Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation
	applies, as specified by the parties.
Longer Designated Maturity for Linear Interpolation	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
Spread:	As specified by the parties.
Day Count Fraction:	As specified by the parties.
Reset Dates ("resetDate"):	As specified by the parties.
Method of Averaging:	As specified by the parties.
Compounding:	As specified by the parties.
Compounding Dates	In the event Compounding is selected, as selected by the

	parties.
Compounding Method (Compounding OR Flat	In the event Compounding is selected, as selected by the
Compounding):	parties.
Period End Dates Business Days:	As specified by the parties from among the Available
	Business Days.
Period End Dates Business Day Convention:	As specified by the parties from among the Available
·	Business Day Conventions.
Payment Dates Business Days:	As specified by the parties from among the Available
	Business Days, subject to any Required Business Days.
Payment Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Reset Dates Business Days:	As specified by the parties from among the Available
·	Business Days, subject to any Required Business Days.
Reset Dates Business Day Convention:	As specified by the parties from among the Available
·	Business Day Conventions.
Swaption Terms:	· · · · ·
Option Style:	As specified by the parties.
Seller:	As specified by the parties.
Buyer:	As specified by the parties.
Seller's Agent:	As specified by the parties.
Premium:	As specified by the parties.
Premium Payment Date:	As specified by the parties.
Business Day Convention for Premium Payment Date:	As specified by the parties.
Business Days for Payments:	As specified by the parties from among the Available
Dusiness Duys for Fuynents.	Business Days, subject to any Required Business Days.
Exercise Business Days:	As specified by the parties.
Swaption Procedure for Exercise:	As specified by the parties.
Commencement Date:	As specified by the parties, if the Option Style is
Commencement Date.	American.
Bermuda Option Exercise Dates:	As specified by the parties, if the Option Style is
berniddu Option Exercise Dutes.	Bermuda.
Expiration Date:	As specified by the parties.
Expiration Time:	As specified by the parties.
Earliest Exercise Time:	As specified by the parties.
Latest Exercise Time:	As specified by the parties.
Exercise Business Day:	As specified by the parties.
Partial Exercise:	As specified by the parties. As specified by the parties, if Option Style is European.
Multiple Exercise:	As specified by the parties, if Option Style is European.
Wulliple Excluse.	or Bermuda.
Minimum Notional Amount:	As specified by the parties if Partial Exercise or Multiple
Millinum Notional Amount.	Exercise is specified.
Maximum Notional Amount:	As specified by the parties if Multiple Exercise is
Maximum Notional Amount.	specified.
Integral Multiple:	As specified by the parties if Partial Exercise or Multiple
integrat Multiple.	Exercise is specified.
Automatic Exercise:	As specified by the parties.
Threshold:	
THESHOLO.	As specified by the parties if Automatic Exercise is
Follbook Exercises	specified.
Fallback Exercise:	As specified by the parties (if required).
Swaption Settlement Terms:	
Cash Settlement	As specified by the parties.
Physical Settlement	As specified by the parties.
Cleared Physical Settlement	As specified by the parties.
ISDA Settlement Matrix:	As specified by the parties, if Cash Settlement is

	applicable to a single currency Underlying Swap Transaction.
ISDA Cross Currency Settlement Matrix:	As specified by the parties, if Cash Settlement is
	applicable and the Underlying Swap Transaction is a
	cross-currency Transaction where the currency pair is
	included in the Matrix.
Cash Settlement Valuation Time:	If Cash Settlement is applicable, as specified by the
	parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Valuation Date:	If Cash Settlement is applicable, as specified by the
	parties, directly or via the ISDA Settlement Matrix.
Valuation Business Days:	If Cash Settlement is applicable, as specified by the
	parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the
	parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date Business Days	If Cash Settlement is applicable, as specified by the
Convention:	parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the
	parties from Available Cash Settlement Methods,
	directly or via the ISDA Settlement Matrix.
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or
	"Cash Price—Alternate" apply, as specified by the
	parties from Available Cash Settlement Methods,
	directly or via the ISDA Settlement Matrix.
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield Curve—
	Adjusted," "Par Yield Curve—Unadjusted" or "Zero
	Coupon Curve—Adjusted" apply, as specified by the
	parties from Available Cash Settlement Methods,
	directly or via the ISDA Settlement Matrix parties from
	Available Cash Settlement Methods, directly or via the
	ISDA Settlement Matrix.
Cash Settlement Reference Banks:	As specified by the parties, if Settlement Rate is
	applicable.
Cash Settlement Reference Banks:	If Cash Settlement is applicable, as specified by the
	parties.
Quotation Rate:	If Cash Settlement is applicable, as specified by the
	parties from among the Available Quotation Rates.
Calculation Agent:	As agreed by the parties.

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	САТО
CHF	Swiss Franc	CHZU
EUR	Euro	EUTA
GBP	Sterling	GBLO
ILS	Israeli Shekel	ILTA
JPY	Japanese Yen	JPTO
MXN	Mexican Peso (New)	MXMC
SAR	Saudi Arabian Riyal	SARI
SEK	Swedish Krona	SEST
SGD	Singapore Dollar	SGSI
TRY	Turkish Lira	TRIS
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

## Fixed Floating Swaptions Available Currencies and Required Business Days

Fixed Floating Swaptions Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

## Fixed Floating Swaptions Underlying Swap Transaction Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

Fixed Floating Swaptions Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP, MXN	Plus Two Banking Days
MXN	Plus One Banking Day
CAD, GBP	Plus Zero

### Fixed Floating Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective	Earliest Termination	Latest Termination
	Date	Date	Date	Date
N/A	N/A	N/A	N/A	N/A

Currency	Minimum	Increment	Maximum	Default
AUD	25,000,000	100,000	N/A	N/A
CAD	5,000,000	100,000	N/A	N/A
CHF	10,000,000	1,000,000	N/A	N/A
EUR	25,000,000	100,000	N/A	N/A
GBP	25,000,000	100,000	N/A	N/A
ILS	5,000,000	100,000	N/A	N/A
JPY	2,500,000,000	100,000,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
SAR	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
SGD	5,000,000	100,000	N/A	N/A
TRY	5,000,000	100,000	N/A	N/A
USD	25,000,000	1,000,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

Fixed Floating Swaptions Underlying Swap Transaction Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-AONIA-OIS- COMPOUND- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-AUBBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Swap Rate-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Reuters				
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-CDOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR-BBA- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-CORRA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-ISDAFIX-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-TOIS-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-EURONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TMM-CDC- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-SONIA-OIS-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
11:00-ICAP				
GBP-WMBA-RONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
ILS-TELBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ILS-TELBOR01- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY USD-Basis Swaps- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF-Bloomberg- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF-Bloomberg- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL- TONAR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
JPY-TONA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	Ν
SAR-SRIOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SAR-SRIOR-SUAA	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-SIOR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- VWAP-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
SGD-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-Annual Swap Rate-11:15- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-TRYIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-TRYIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
H.15-Bloomberg				
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate- 3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-LON- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Bloomberg				
USD-TBILL- Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T500	All quoted tenors	N/A	Per ISDA 2006	Ν
VND-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
VND-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-DEPOSIT- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-DEPOSIT- SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-JIBAR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-JIBAR-SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-PRIME- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-PRIME- AVERAGE-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν

Fixed Floating Swaption Underlying Swap Transaction Requirements and Defaults

Variable	Requirement	Default
Effective Date Business Day		No Adjustment
Convention		
Termination Date Business Day		No Adjustment
Convention		
Period End Dates		Payment Dates
Payment Date Business Day		Modified Following
Convention		_
Linear Interpolation		Applicable only to long or short stub
		periods

Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation		longer than the actual Calculation
		Period length
Compounding		Inapplicable
Compounding Business Day	Same as Business Day Convention	
Convention	for Period End Dates	
Method of Averaging	Weighted Average or Unweighted	Unweighted Average
	Average	
Compounding Method	Compounding or Flat Compounding	Compounding

#### Fixed Floating Swaption Requirements and Defaults

Setting	Requirement	Default
Option Style:	American, Bermuda, European	
Premium Payment Date Business		Following
Day Convention		

# Fixed Floating Swaption Requirements and Defaults (Swaption—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day		Banking Day for cash Settlement
		Currency (TARGET Settlement Day
		for EUR)
Latest Exercise Time	On Expiration Date, the Expiration	Other than Expiration Date, the
	Time	Expiration Time
Automatic Exercise		
Threshold		

# Fixed Floating Swaption Requirements and Defaults (Swaption Cash Settlement)

Setting	Requirement/Choices	Default
Cash Settlement Amount		
ISDA Settlement Matrix		Applicable, if single currency swap with Currency included in Matrix
ISDA Cross Currency Settlement Matrix		Applicable, if cross currency swap with currency pair included in Matrix
Cash Settlement Valuation Time		
Cash Settlement Valuation Date		Two Valuation Business Days before Mandatory/Optional Early Termination Date <b>but</b> same day for CAD, GBP or DKK with Floating Rate Option of "DKK-CIBOR- DKNA13" or "DKK-CIBOR- DKNA13-Bloomberg"
Valuation Business Day		Banking Days in locations per the Business Day Location Table, plus additional days required by for fixings under the Floating Rate Option(s)

Cash Settlement Payment Date Business Day Convention		Following
Cash Settlement Method	Cash Price Cash Price—Alternate Method Collateralized Cash Price Par Yield Curve—Adjusted Par Yield Curve—Unadjusted Zero Coupon Yield—Adjusted	
Cash Settlement Currency		For single currency, same as Notional Amount, otherwise as specified in ISDA Master Agreement, or otherwise same as Notional Amount for Fixed Amount
Settlement Rate	ISDA Source/Other Price Source/Reference Banks	
Cash Settlement Reference Banks		Fallbacks per ISDA 2006 Definitions
Quotation Rate	bid ask mid	

# Forward Rate Agreements (Uncleared)

## **Terms and Conditions**

Summary:	This covers uncleared forward rate agreements ("Forward Rate Agreements" or "FRAs").
Limitations on Available Selections and Default Settings:	The terms under which an FRA may be traded are as specified in these terms and conditions and in the attached tables.
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made. For these purposes "TARGET"/EUTA is considered a location.
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.
	In some cases, the same contract might have different terms depending on the market in which it is traded ( <i>e.g.</i> , London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	These terms and conditions incorporate by reference the following industry standard documentation and standards: (a) 2006 ISDA Definitions (b) ISDA OTC Taxonomies (c) FpML Location Codes
	For convenience, certain terms are mapped to their FpML 5.2.4 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	FRA
ISDA OTC Sub-Product:	N/A
Further Limitations:	None

Terms:	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see
	below) agreed by the parties.
Effective Date ("adjustedEffectiveDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
Effective Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Termination Date ("adjustedTerminationDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
Termination Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Fixed Rate Payer ("buyerPartyReference"):	As specified by the parties.
Fixed Rate ("fixedRate"):	As specified by the parties.
Floating Rate Payer ("sellerPartyReference"):	As specified by the parties.
Payment Date ("paymentDate"):	As specified by the parties.
Floating Rate Option ("floatingIndex"):	As specified by the parties.
Designated Maturity ("indexTenor"):	As specified by the parties.
Spread:	As specified by the parties.
Floating Rate Day Count Fraction	As specified by the parties.
("dayCountFraction"):	
Reset Date:	The Effective Date.
Discounting ("fraDiscounting"):	As specified by the parties.
Business Days:	As specified by the parties.
Calculation Agent:	As specified by the parties.

## FRA Available Currencies and Required Business Days

Three Letter Currency Code	Currency Name (ISDA)	Basic Business Day Locations
(ISDA/ISO)		For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	CATO
CHF	Swiss Franc	CHZU
CZK	Czech Koruna	CZPR
DKK	Danish Krone	DKCO
EUR	Euro	EUTA
GBP	Sterling	GBLO
HUF	Hungarian Forint	HUBU
ILS	Israeli Shekel	ILTA
JPY	Japanese Yen	JPTO
NOK	Norwegian Krone	NOOS
NZD	New Zealand Dollar	NZAU and NZWE
PLN	Polish Zloty	PLWA
SEK	Swedish Krona	SEST
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

## FRA Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding

## FRA Available Day Count Fractions

ISDA Name
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)
1/1

#### FRA Notional Amounts

Currency	Minimum	Increment	Maximum	Default
AUD	5,000,000	100,000	N/A	N/A
CAD	5,000,000	100,000	N/A	N/A
CHF	5,000,000	100,000	N/A	N/A
CZK	5,000,000	100,000	N/A	N/A
DKK	5,000,000	100,000	N/A	N/A
EUR	5,000,000	100,000	N/A	N/A
GBP	5,000,000	100,000	N/A	N/A
HUF	5,000,000	100,000	N/A	N/A
ILS	5,000,000	100,000	N/A	N/A
JPY	500,000,000	10,000,000	N/A	N/A
NOK	5,000,000	100,000	N/A	N/A
NZD	5,000,000	100,000	N/A	N/A
PLN	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
USD	10,000,000	1,000,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

## FRA Floating Rate Options and Defaults

Currency	Floating Rate Option (any from ISDA 2006 if not specified)	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations	Default for Currency (Y/N)
AUD				Actual/360	N	
CAD						
CHF						
CZK				Actual/360	Ν	
DKK						
EUR						
GBP						
HUF						
ILS	ILS- TELBOR01- Reuters	All quoted	Ν	Per ISDA 2006	Ν	Y
JPY						
NOK						
NZD	NZD-BBR- FRA	All quoted	Ν	Per ISDA 2006	Ν	Y
PLN						

SEK					
USD	USD-LIBOR-	3M	Actual/360	GBLO	Y
	BBA				
ZAR					

## FRA Discounting Types

ISDA Name	FpML	Default for (Currency)
FRA Discounting	ISDA	All but AUD
FRA Yield Discounting	AFMA	AUD
None	NONE	None

## Forward Rate Agreements - CME Cleared

Summary:	This covers forward rate agreements ("FRAs") cleared
	by the Chicago Mercantile Exchange Inc. ("CME").
Limitations on Available Selections and Default	The terms under which a Forward Rate Agreement/CME
Settings:	Cleared may be traded are as specified in these terms
	and conditions, which incorporate the CME Rulebook,
	in particular Chapters 900 and 901 (and any successor
	provisions) and the CME Cleared IRS Product Scope (or
	any successor).
	By electing to trade a Forward Rate
	Agreement/CME Cleared, participants are
	representing that they are familiar with the CME
	Rulebook and the limitations on transaction terms
	contained in it.
Incorporated Standards:	This contract description incorporates by reference the
	CME Rulebook as in effect from time to time.
	The CME Rulebook itself may incorporate certain
	additional standards, such as the 2006 ISDA Definitions.
	Be aware that the timing of effectiveness of
	amendments or supplements to the ISDA standards
	may vary between bilateral and CME contracts,
	since the CME may reserve the right to select when
	and how such changes become effective.
Product Type/ISDA OTC Taxonomy: ISDA OTC Asset Class:	Interest Rate
ISDA OTC Asset Class: ISDA OTC Base Product:	FRA
ISDA OTC Sub-Product(s):	N/A
Further Limitations:	Must comply with CME Clearing Requirements.
Terms:	Must compty with CME Clearing Requirements.
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2000/ISDA2006) elected
Demitton Set.	by, or otherwise binding on, the parties in accordance
	with the CME Rulebook.
Effective Date:	As per the CME Rulebook.
Notional Amount:	An amount in Currency determined by the parties
Totional 7 mount.	subject to the limitations in the CME Rulebook.
	This may vary from period to period to the extent
	permitted by the CME Rulebook.
	The CME Rulebook may limit the Currencies and
	Floating Rate Options for which variable notionals are
	permitted.
Currency:	One of the currencies permitted for the relevant
5	transaction type per the CME Rulebook.
Business Days:	As per the CME Rulebook, which may require certain
	Business Days be applicable on a per Currency or
	Floating Rate Option Basis and may otherwise limit the
	available Business Day locations which can be elected.
Business Day Convention:	As per the CME Rulebook.
Trade Date:	As per the CME Rulebook.
Settlement:	As per the CME Rulebook, in advance or arrears.
Termination Date:	As agreed by the parties, subject to any minimum or
	maximum tenor in the CME Rulebook.
Termination Date Business Day Convention:	As per the CME Rulebook, and thus subject to

	limitations based on other terms of the transaction.
Fixed Rate Payer Payment Dates:	As per the CME Rulebook.
Fixed Amount:	As per the CME Rulebook, which may permit use of a schedule.
Fixed Rate:	As agreed by the parties, subject to any minimum or maximum rate and per-period variability permitted in the CME Rulebook.
Floating Rate Payer Payment Dates:	As per the CME Rulebook.
Floating Amount:	As per the CME Rulebook.
Floating Rate Option:	As determined by the parties, subject to the CME Rulebook, which may provide a more limited list of available options for a Currency than does the Definition Set
Designated Maturity:	As per the CME Rulebook, which may provide a more limited set of Designated Maturities than does the related rate source page.
Spread:	Subject to any minimum or maximum rate and per- period variability permitted by the CME Rulebook.
Reset Dates:	As the per CME Rulebook.
Floating Rate Daycount Fraction:	As per the CME Rulebook.
FRA Discounting:	As per CME Rulebook, which may require different discounting conventions depending on payment convention.
Fixed Rate Payer:	As determined by the parties.
Floating Rate Payer:	As determined by the parties.
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitations in the CME Rulebook.
Additional Payment/Fees:	As determined by the parties, subject to limitations in the CME Rulebook.
Payment Date for Additional Payment/Fees:	As determined by the parties, subject to limitations in the CME Rulebook.

## Forward Rate Agreements – LCH Cleared

Summary:	This covers forward rate agreements ("FRAs") cleared by LCH.Clearnet ("LCH").
Limitations on Available Selections and Default Settings:	The terms under which a Forward Rate Agreement/LCH Cleared may be traded are as specified in these terms
	and conditions, which incorporate the LCH Rulebook, in
	particular Schedule 4A (or any successor provisions).
	By electing to trade a Forward Rate Agreement/LCH
	Cleared, participants are representing that they are
	familiar with the LCH Rulebook and the limitations
	on transaction terms contained in it.
Incorporated Standards:	This contract description incorporates by reference the LCH Rulebook as in effect from time to time.
	The LCH Rulebook itself may incorporate certain
	additional standards, such as the 2000 ISDA Definitions
	and 2006 ISDA Definitions.
	Be aware that the timing of effectiveness of
	amendments or supplements to the ISDA standards
	may vary between bilateral and LCH contracts, since
	the LCH may reserve the right to select when and how such changes become effective.
Product Type/ISDA OTC Taxonomy:	now such changes become enective.
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	FRA
ISDA OTC Sub-Product:	N/A
Further Limitations:	Must comply with LCH Clearing Requirements.
Terms:	Must comply with LCH Clearing Requirements.
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2000/ISDA2006) elected
Demintion Set.	by, or otherwise binding on, the parties in accordance
	with the LCH Rulebook.
Notional Amount:	An amount in Currency determined by the parties
	subject to limitations in the LCH Rulebook.
	This may vary from period to period to the extent
	permitted by the LCH Rulebook.
	The LCH Rulebook may limit the Currencies and
	Floating Rate Options for which variable notionals are
	permitted.
Currency:	One of the currencies permitted for the relevant
	transaction type per the LCH Rulebook.
Trade Date:	As per the LCH Rulebook.
Effective Date:	As per the LCH Rulebook.
Termination Date:	As agreed by the parties, subject to any minimum or
	maximum tenor in the LCH Rulebook.
Payer for Additional Payment/Fees:	As determined by the parties, subject to the limitation in
	the LCH Rulebook.
Additional Payment/Fees:	As determined by the parties, subject to the limitation in
	the LCH Rulebook.
Payment Date for Additional Payment/Fees	As determined by the parties, subject to limitations in
	the LCH Rulebook, which may limit the earliest or latest
	day on which such fees may be paid based on Currency
	or other factors.
Business Days:	As per the LCH Rulebook, which may require certain

	Business Days be applicable on a per Currency or
	Floating Rate Option Basis and may otherwise limit the
	available Business Day locations which can be elected.
Business Day Convention:	As per the LCH Rulebook.
Fixed Rate Payer:	As determined by the parties.
Fixed Rate Payer Payment Dates:	As per the LCH Rulebook.
Fixed Amount:	As per the LCH Rulebook, which may permit use of a schedule.
Fixed Rate:	As agreed by the parties, subject to any minimum or
	maximum rate and per-period variability permitted in the LCH Rulebook.
Floating Rate Payer:	As determined by the parties.
Floating Rate Payer Payment Dates:	As per the LCH Rulebook.
Floating Amount:	As per the LCH Rulebook.
Floating Rate Option:	As determined by the parties, subject to the LCH
	Rulebook, which may provide a more limited list of
	available options for a Currency than does the Definition
	Set.
Designated Maturity:	As per the LCH Rulebook, which may provide a more
	limited set of Designated Maturities than does the
	related rate source page.
Spread:	Subject to any minimum or maximum rate and per-
	period variability permitted by the LCH Rulebook.
Reset Dates:	As the per LCH Rulebook.
Floating Rate Daycount Fraction:	As per the LCH Rulebook.
FRA Discounting:	As per the LCH Rulebook.
Discount Rate	As per the LCH Rulebook.
FRA Yield Discounting:	As per the LCH Rulebook.
Negative Interest Rates:	As per the LCH Rulebook, which may require use of a
	single method.
Withholding and Tax:	As per the LCH Rulebook.
Governing Law:	As per the LCH Rulebook, which may dictate the law
	applicable to the Transaction.

## <u>iBoxx Index Swaps</u>

Summary:	This covers iBoxx index swaps (each, an "iBoxx Index			
Limitations on Available Selections and Default Settings:	Swap") on a bilateral basis.The terms under which an iBoxx Index Swap may be traded are shown below and in the attached tables.			
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.			
	For Business Days, the defaults shall be the locations specified for the relevant currency and any additional locations specified for the relevant Floating Rate Options.			
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made.			
	For these purposes "TARGET" is considered a location.			
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.			
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.			
	In some cases, the same contract might have different terms depending on the market in which it is traded ( <i>e.g.</i> , London versus NY). In that case the default settings may vary by market.			
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards:			
	<ul> <li>(a) 2006 ISDA Definitions</li> <li>(b) the iBoxx Index Transaction Standard Terms Supplement (current version or as specified by the parties) ("iBoxx STS")</li> <li>For convenience, certain terms are mapped to their FpML 5.5 equivalent.</li> </ul>			
Product Type/ISDA OTC Taxonomy:				
ISDA OTC Asset Class:	Credit			
ISDA OTC Base Product:	Total Return Swap Index			
ISDA OTC Sub-Product:	iBoxx			
ISDA OTC Transaction type:	N/A			

Further Limitations:	None
Terms:	
Trade Date:	As agreed by the parties.
Effective Date ("effectiveDate"):	The Business Day following the Trade Date, unless
	otherwise agreed by the parties.
Effective Date Business Days:	The Business Days specified below, unless otherwise
	specified by the parties.
Effective Date Business Day Convention:	The Business Day Convention specified below, unless
Termination Data ("termination Data")	otherwise specified by the parties. As specified in the iBoxx STS, unless otherwise agreed
Termination Date ("terminationDate"):	by the parties.
Notional Amount ("notional"):	An amount specified by the parties, which will be in the
	relevant Settlement Currency (unless otherwise agreed
	by the parties).
Index	As specified by the parties from among the Available Indices.
Index Buyer:	As agreed by the parties.
Index Seller:	As agreed by the parties.
Calculation Agent:	As specified in the iBoxx STS, unless otherwise agreed
C	by the parties.
Settlement Currency:	The currency in which the Index is denominated.
Business Days:	As specified in the iBoxx STS for the relevant
	Settlement Currency, unless otherwise agreed by the
	parties.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	Index Buyer
Floating Rate Payer Period End Dates:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties
Floating Rate Payer Payment Dates:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties
Linear Interpolation:	As specified in the iBoxx STS, unless otherwise agreed by the parties
Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation
bhorter Designated maturity for Emeta interpolation.	applies, per the Definitions unless otherwise agreed by
	the parties.
Longer Designated Maturity for Linear Interpolation	For a Calculation Period to which Linear Interpolation
	applies per the Definitions unless otherwise agreed by
	the parties.
Floating Rate Option:	As specified by the parties.
Floating Rate for the initial Calculation Period	As specified by the parties.
Spread:	As specified by the parties.
Designated Maturity ("indexTenor")	As specified in the iBoxx STS, unless otherwise agreed by the parties.
Floating Rate Day Count Fraction:	As specified in the iBoxx STS, unless otherwise agreed
rouning Rule Day Count Fraction.	by the parties.
Reset Dates ("resetDate"):	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.
Payment Dates Business Days:	The Business Days specified above, unless otherwise
,	agreed by the parties.
Business Days (Other Than Payment Dates):	The Business Days specified above, unless otherwise
	agreed by the parties.
Business Day Convention (Other Than Payment Dates):	The Business Day Convention specified above, unless
- · · · · /	otherwise specified by the parties.

Index Return Amount:	
Index Return Amount Payment Date:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.
Initial Fixing Amount:	As agreed by the parties and rounded as specified in the
	iBoxx STS (unless the parties otherwise agree).
Final Fixing Amount:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.
Scheduled Final Fixing Date:	As specified by the parties, subject to the Business Day
	Convention (unless the parties otherwise agree).
Final Fixing Date:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.
Index Adjustment and Index Discontinuance Events:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.

## iBoxx Index Available Currencies and Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
EUR	Euro	EUTA and GBLO
GBP	Sterling	EUTA and GBLO
USD	United States Dollars	USNY

## iBoxx Index Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

#### iBoxx Index Available Indices

Name	Currency
iBoxx EUR Corporates	EUR
iBoxx EUR Liquid High Yield Index	EUR
iBoxx GBP Corporates	GBP
iBoxx USD Domestic Corporates	USD
iBoxx USD Liquid High Yield Index	USD
iBoxx USD Liquid Investment Grade Index	USD
iBoxx USD Liquid Leveraged Loans Index	USD

## iBoxx Index Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate- 3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν

## iBoxx Index Floating Rate Options and Defaults

USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-LON- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL- Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T500	All quoted tenors	N/A	Per ISDA 2006	Ν

EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν

EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TMM-CDC- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν

GBP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-SONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-RONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν

## Inflation Swaps

Summary:	This covers inflation swaps ("Inflation Swaps").
Limitations on Available Selections and Default	The terms under which an Inflation Swap may be traded
Settings:	are as specified in these terms and conditions or in the
	attached tables.
	En en en el
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	For Business Days, the defaults shall be the locations
	specified for the relevant currency, any additional
	locations specified for the relevant Floating Rate
	Options.
	The parties may add additional locations from the
	Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made. For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which
	the parties will transact. These are shown as "Default"
	and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a
	variety of currencies. Since each national market has its
	own peculiarities, the "Available Terms" and/or "Default
	Terms" may vary by currency.
	In some cases, the same contract might have different
	terms depending on the market in which it is traded (e.g., London varius NX). In that case the default settings may
	London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the
incorporateu Standarus.	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions
	(b) 2008 ISDA Inflation Derivatives Definitions,
	including Supplements 1 and 2 thereto and any other
	Supplements through Trade Date
	<ul><li>(c) ISDA OTC Taxonomies</li><li>(d) FpML Location Codes</li></ul>
	(d) Trivit Location Codes
	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Inflation
Further Limitations:	None
Terms:	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see
Effortivo Data ("offortivoData"):	below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance

	with any applicable Business Day Convention.
	The parties may express the unadjusted Effective Date as
	a number of Business Days or Banking Days from the
	Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Termination Date as a number of days, months or years from the Effective Date ("relativeTerminationDate").
Termination Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Fixed Amount:	
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.
Fixed Amount:	As specified by the parties (in lieu of all items other than Payment Date(s)).
Fixed Rate Payment Date ("unadjustedPaymentDate"):	As specified by the parties.
Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
initial Floating Rate:	As specified by the parties.
Floating Rate ("floatingRate"):	Notwithstanding the 2006 Definitions, "Floating Rate" will equal:
	<u>Index_Final</u> Index_Initial – 1
	Index_Initial
	rounded in accordance with the 2008 ISDA Inflation Derivatives Definitions and subject to the Negative Interest Rate Treatment.
Index:	As specified by the parties from among the Available Inflation Indices.
Index_Initial ("initialIndexLevel"):	As specified by the parties.
Index_Final:	The Index level for the Reference Month(s) specified by the parties in the Reference Year(s) specified by the parties.
Reference Month(s):	As specified by the parties.
Reference Year(s)	As specified by the parties.
Day Count Fraction:	1/1
Reset Dates ("resetDate"):	As specified by the parties.
Method of Averaging:	As specified by the parties.
Payment Dates Business Days:	As specified by the parties from among the Available
	Business Days, subject to any Required Business Days.

Payment Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Negative Interest Rates ("negativeInterestRateMethod"):	As selected by the parties from among the Available
	Treatments.
Related Bond:	The bond, if any, specified by the parties as such.
Fallback Bond ("fallbackBondApplicable"):	As selected by the parties if no Related Bond is selected.
Calculation Agent:	As agreed by the parties.

#### Fixed Floating Available Currencies and Required Business Days

Three Letter Currency Code	Currency Name (ISDA)	Basic Business Day Locations
(ISDA/ISO)		For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
EUR	Euro	EUTA
GBP	Sterling	GBLO
ILS	Israeli Shekel	ILTA
USD	United States Dollars	USNY

#### Fixed Floating Available Business Day Conventions

ISDA Name		
Following		
Modified/Modified Following		
No Adjustment		
Preceding		
FRN Convention/Eurodollar Convention		

#### Fixed Floating Available Day Count Fractions

ISDA Name

1/1

#### Fixed Floating Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP	Plus Two Banking Days
CAD, GBP	Plus Zero

#### Fixed Floating Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective	Earliest Termination	Latest Termination
	Date	Date	Date	Date
N/A	N/A	N/A	N/A	N/A

### Fixed Floating Notional Amounts

Currency	Minimum	Increment	Maximum	Default
EUR	5,000,000	100,000	N/A	N/A
GBP	5,000,000	100,000	N/A	N/A
USD	10,000,000	1,000,000	N/A	N/A

Inflation Swap Indices

Index Name	Description	
AUD-CPI	Australia: AUD – Non-revised Consumer Price Index (CPI)	
AUS-CPI	Austria: AUS – Non-revised Consumer Price Index (CPI)	
AUS-HICP	Austria: AUS – Non-revised Harmonised Indices of Consumer Prices (HICP)	
BLG-CPI-GI	Belgium: BLG – Non-revised Consumer Price Index - General Index (CPI)	
BLG-CPI-HI	Belgium: BLG – Non-revised Consumer Price Index - Health Index (CPI)	
BLG-HICP	Belgium: BLG – Non-revised Harmonised Consumer Price Index (HICP)	
DEM-CPI	Germany: DEM – Non-revised Consumer Price Index (CPI)	
DEM-CPI-NRW	Germany: DEM – Non-revised Consumer Price Index for North Rhine-Westphalia	
DEM-HICP	Germany: DEM – Non-revised Harmonised Consumer Price Index (HICP)	
ESP-CPI	Spain: ESP – National-Non-revised Consumer Price Index (CPI)	
ESP-HICP	Spain: ESP – Harmonised-Non-revised Consumer Price Index (HICP)	
ESP-R-CPI	Spain: ESP – National-Revised Consumer Price Index (CPI).	
ESP-R-HICP	Spain: ESP – Harmonised-Revised Consumer Price Index (HICP)	
EUR-AI-CPI	European Union: EUR – All Items-Non-revised Consumer Price Index	
EUR-AI-R-CPI	European Union: EUR – All Items–Revised Consumer Price Index	
EUR-EXT-CPI	European Union: EUR – Excluding Tobacco-Non-revised Consumer Price Index	
EUR-EXT-R- CPI	European Union: EUR – Excluding Tobacco–Revised Consumer Price Index	
FRC-EXT-CPI	France: FRC – Excluding Tobacco-Non-Revised Consumer Price Index	
FRC-HICP	France: FRC – Harmonised-Non-revised Consumer Price Index (HICP)	
GRD-CPI	Greece: GRD – Non-revised Consumer Price Index (CPI)	
GRD-HICP	Greece: GRD – Harmonised-Non-revised Consumer Price Index (HICP)	
ILS-CPI	Israel: ILS – Non-revised Consumer Price Index (CPI)	
IRL-CPI	Ireland: IRL – Non-revised Consumer Price Index (CPI)	
IRL-HICP	Ireland: IRL – Harmonised-Non-revised Consumer Price Index (HICP)	

ITL-BC-EXT- CPI	Italy: ITL – Inflation for Blue Collar Workers and Employees–Excluding Tobacco Consumer Price Index	
ITL-BC-INT- CPI	Italy: ITL – Inflation for Blue Collar Workers and Employees-Including Tobacco Consumer Price Index	
ITL-HICP	Italy: ITL – Non-revised Harmonised Consumer Price Index (HICP)	
ITL-WC-EXT- CPI	Italy: ITL – Whole Community –Excluding Tobacco Consumer Price Index	
ITL-WC-INT- CPI	Italy: ITL – Whole Community –Including Tobacco Consumer Price Index	
LUX-CPI	Luxembourg: LUX – Non-revised Consumer Price Index (CPI)	
LUX-HICP	Luxembourg: LUX – Harmonised-Non-revised Consumer Price Index (HICP)	
NLG-CPI	Netherlands: NLG – Non-revised Consumer Price Index (CPI)	
NLG-HICP	Netherlands: NLG – Harmonised-Non-revised Consumer Price Index (HICP)	
POR-CPI	Portugal: POR – Non-revised Consumer Price Index (CPI)	
POR-HICP	Portugal: POR – Harmonised-Non-revised Consumer Price Index (HICP)	
UK-HICP	United Kingdom: GBP – Harmonised-Non-revised Consumer Price Index (HICP)	
UK-RPI	United Kingdom: GBP – Non-revised Retail Price Index (UKRPI)	
UK-RPIX	United Kingdom: GBP – Non-revised Retail Price Index Excluding Mortgage Interest Payments (UKRPIX)	
USA-CPI-U	United States: USA – Non-revised Consumer Price Index – Urban (CPI-U)	

Fixed Floating Requirements and Defaults (Excluding Optional Early Termination and Mandatory Early Termination)

Variable	Requirement	Default
Fallback Bond:		Applicable

## Interest Rate Caps/Floors

Summary:	This covers interest rate caps and floors ("Interest Rate Caps/Floors")
Limitations on Available Selections and Default	Caps/Floors"). The terms under which an Interest Rate Cap/Floor may
Settings:	be traded are as specified in these terms and conditions
	and in the attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations
	specified for the relevant currency, any additional
	locations specified for the relevant Floating Rate
	Options.
	The parties may add additional locations from the
	Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made. For these
	purposes "TARGET" is considered a location. In many cases there are normal "vanilla" terms on which
	the parties will transact. These are shown as "Default"
	and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a
	variety of currencies. Since each national market has its
	own peculiarities, the "Available Terms" and/or "Default
	Terms" may vary by currency.
	In some cases, the same contract might have different
	terms depending on the market in which it is traded (e.g.,
	London versus NY). In that case the default settings may
	vary by market.
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and
	following industry standard documentation and standards:
	(a) 2006 ISDA Definitions
	(b) ISDA Settlement Matrix (if Optional Early
	Termination applies)
	(c) ISDA OTC Taxonomies
	(d) FpML Location Codes
	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Cap/Floor
Further Limitations:	None
Terms:	An amount in one of the Assolution Common size (asso
Notional Amount ("notional"):	An amount in one of the Available Currencies (see below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance
Liter o Bute ( circeir oBute ).	with any applicable Business Day Convention.
	The parties may express the unadjusted Effective Date as

a number of Business Days or Banking Days from the
Trade Date ("relativeEffectiveDate"). As specified by the parties from among the Available
Business Days.
As specified by the parties from among the Available
Business Day Conventions.
The date specified by the parties, adjusted in accordance
with any applicable Business Day Convention.
The parties may express the unadjusted Termination
Date as a number of days, months or years from the
Effective Date ("relativeTerminationDate").
As specified by the parties from among the Available
Business Day Conventions.
As specified by the parties.
As specified by the parties if there is a short initial
Calculation Period.
As specified by the parties.
As specified by the parties.
As specified by the parties.
As specified by the parties from among the Available
Business Days.
As specified by the parties from among the Available
Business Day Conventions.
As specified by the parties from among the Available
Business Days, subject to any Required Business Days.
As specified by the parties from among the Available
Business Day Conventions.
As specified by the parties.
As specified by the parties.
As specified by the parties.
As specified by the parties if there is a short initial
Calculation Period.
As specified by the parties.
For the Calculation Periods specified by the parties.
For a Calculation Period to which Linear Interpolation
applies, as specified by the parties.
ppres, as specifica of the parties.
For a Calculation Period to which Linear Interpolation
For a Calculation Period to which Linear Interpolation applies as specified by the parties
applies, as specified by the parties.
applies, as specified by the parties. As specified by the parties.
applies, as specified by the parties.As specified by the parties.As specified by the parties.
applies, as specified by the parties. As specified by the parties.

Compounding Dates:	In the event Compounding is selected, as selected by parties.		
Compounding Method (Compounding OR Flat	In the event Compounding is selected, as selected by the		
Compounding):	parties.		
Period End Dates Business Days:	As specified by the parties from among the Available Business Days.		
Period End Dates Business Day Convention:	As specified by the parties from among the Availabl Business Day Conventions.		
Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.		
Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.		
Reset Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.		
Reset Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.		
Initial Exchange:			
Initial Exchange Date:	As specified by the parties.		
Fixed Rate Payer Initial Exchange Amount:	As specified by the parties.		
Floating Payer Initial Exchange Amount:	As specified by the parties.		
Interim Exchanges:			
Interim Exchange Dates:	As specified by the parties.		
Fixed Rate Payer Interim Exchange Amount:	As specified by the parties.		
Fixed Rate Payer Interim Exchange Amount:	As specified by the parties.		
Final Exchanges:			
Final Exchange Date:	As specified by the parties.		
Fixed Rate Payer Final Exchange Amount:	As specified by the parties.		
Fixed Payer Final Exchange Amount:	As specified by the parties.		
Optional Early Termination:			
Optional Early Termination:	As specified by the parties.		
Option Style:	As specified by the parties.		
Optional Early Termination Date:	As specified by the parties.		
Seller:	As specified by the parties if only one party can terminate.		
Buyer:	As specified by the parties, if only one party can terminate.		
Seller's Agent:	As specified by the parties, if only one party can terminate.		
Business Days for Payments:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.		
Exercise Business Days:	As specified by the parties.		
<b>Optional Early Termination Procedure for Exercise:</b>			
Commencement Date:	As specified by the parties, if the Option Style is American.		
Bermuda Option Exercise Dates:	As specified by the parties, if the Option Style is Bermuda.		
Expiration Date:	As specified by the parties.		
Expiration Time:	As specified by the parties.		
Earliest Exercise Time:	As specified by the parties.		
Latest Exercise Time:	As specified by the parties.		
Exercise Business Day:	As specified by the parties.		
Partial Exercise:	As specified by the parties, if Option Style is European.		
Multiple Exercise:	As specified by the parties, if Option Style is American or Bermuda.		

Minimum Notional Amount:	As specified by the parties if Partial Exercise or Multiple			
	Exercise is specified.			
Maximum Notional Amount:	As specified by the parties if Multiple Exercise is			
	specified.			
Integral Multiple:	As specified by the parties if Partial Exercise or Multiple			
	Exercise is specified.			
<b>Optional Early Termination Settlement Terms:</b>				
Cash Settlement:	As specified by the parties.			
ISDA Settlement Matrix:	As specified by the parties, if Cash Settlement is			
	applicable.			
Cash Settlement Valuation Time:	If Cash Settlement is applicable, as specified by the			
	parties, directly or via the ISDA Settlement Matrix.			
Cash Settlement Valuation Date:	If Cash Settlement is applicable, as specified by the			
	parties, directly or via the ISDA Settlement Matrix.			
Valuation Business Days:	If Cash Settlement is applicable, as specified by the			
	parties, directly or via the ISDA Settlement Matrix.			
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the			
•	parties, directly or via the ISDA Settlement Matrix.			
Cash Settlement Payment Date Business Days	If Cash Settlement is applicable, as specified by the			
Convention:	parties, directly or via the ISDA Settlement Matrix.			
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the			
	parties from Available Cash Settlement Methods,			
	directly or via the ISDA Settlement Matrix.			
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or			
	"Cash Price—Alternate" apply, as specified by the			
	parties from Available Cash Settlement Methods,			
	directly or via the ISDA Settlement Matrix.			
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield Curve—			
	Adjusted," "Par Yield Curve—Unadjusted" or "Zero			
	Coupon Curve—Adjusted" apply, as specified by the			
	parties from Available Cash Settlement Methods,			
	directly or via the ISDA Settlement Matrix parties from			
	Available Cash Settlement Methods, directly or via the			
	ISDA Settlement Matrix.			
Cash Settlement Reference Banks:	As specified by the parties.			
Quotation Rate:	If Cash Settlement is applicable, as specified by the			
	parties from among the Available Quotation Rates.			
Calculation Agent:	As agreed by the parties.			

## Cap/Floor Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
EUR	Euro	EUTA
GBP	Pound Sterling	GBLO
JPY	Japanese Yen	JPTO
MXN	Mexican Peso (New)	MXMC
SEK	Swedish Krona	SEST
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

#### Cap/Floor Available Business Day Conventions

ISDA Name	
Following	
Modified/Modified Following	
No Adjustment	
Preceding	
FRN Convention/Eurodollar Convention	

#### Cap/Floor Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

#### Cap/Floor Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP, MXN	Plus Two Banking Days
MXN	Plus One Banking Day
CAD, GBP	Plus Zero

#### Cap/Floor Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective	Earliest Termination	Latest Termination
	Date	Date	Date	Date
N/A	N/A	N/A	N/A	N/A

#### Cap/Floor Notional Amounts

Currency	Minimum	Increment	Maximum	Default
EUR	5,000,000	100,000	N/A	N/A
GBP	25,000,000	100,000	N/A	N/A
JPY	2,500,000,000	100,000,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
USD	25,000,000	1,000,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

#### Cap/Floor Floating Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap	All quoted tenors	N/A	Per ISDA 2006	Ν

Rate-10:00-Bloomberg				
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURONIA-OIS-	All quoted tenors	N/A	Per ISDA 2006	Ν

COMPOUND				
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TMM-CDC- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	N
SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-SIOR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	N
USD-Annual Swap	All quoted tenors	N/A	Per ISDA 2006	N

<b>D</b> = 11.00				
Rate-11:00- BGCANTOR				
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate- 3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)

USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-LON- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL- Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T500	All quoted tenors	N/A	Per ISDA 2006	Ν
VND-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
VND-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν

ZAR-DEPOSIT- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-DEPOSIT- SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-JIBAR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
ZAR-JIBAR-SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-PRIME- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-PRIME- AVERAGE-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N

# Cap/Floor Requirements and Defaults (Excluding Optional Early Termination and Mandatory Early Termination)

Variable	Requirement	Default
Effective Date Business Day	-	No Adjustment
Convention:		
Termination Date Business Day		No Adjustment
Convention:		
Period End Dates:		Payment Dates
Payment Date Business Day		Modified Following
Convention:		
Linear Interpolation:		Applicable only to long or short stub
		periods
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation:		longer than the actual Calculation
		Period length
Compounding:		Inapplicable
Compounding Business Day	Same as Business Day Convention	
Convention:	for Period End Dates	
Method of Averaging:	Weighted Average or Unweighted	Unweighted Average
	Average	
Compounding Method:	Compounding or Flat Compounding	Compounding
Initial Exchange Date:		Effective Date
Initial Exchange Date Business Day		Following
Convention:		
Interim Exchange Date Business		Modified Following
Day Convention:		
Final Exchange Date:		Termination Date
Final Exchange Date Business Day		Modified Following
Convention:		

Cap/Floor Requirements and Defaults (Optional Early Termination and Mandatory Early Termination)

Setting	Requirement	Default
Optional Early Termination:		Inapplicable
Mandatory Early Termination:		Inapplicable
Option Style:	American, Bermuda, European	
Cash Settlement:	Required for Mandatory Early	Applicable (i.e., Transaction is <b>not</b>
	Termination	"torn up for no value")

Optional Early Termination Date:	Cash Settlement Payment Date
Optional Early Termination Date	Following
Business Day Convention:	
Mandatory Early Termination Date	Modified Following
Business Day Convention:	-

#### Cap/Floor Requirements and Defaults (Optional Early Termination—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day:		Banking Day for cash Settlement Currency (TARGET Settlement Day for EUR)
Latest Exercise Time:	On Expiration Date, the Expiration Time	Other than Expiration Date, the Expiration Time

#### Setting Requirement/Choices Default Cash Settlement Amount: **ISDA Settlement Matrix:** Applicable, if single currency swap with Currency included in Matrix Cash Settlement Valuation Time: Cash Settlement Valuation Date: Two Valuation Business Days before Mandatory/Optional Early Termination Date **but** same day for CAD, GBP or DKK with Floating Rate Option of "DKK-CIBOR-DKNA13" or "DKK-CIBOR-DKNA13-Bloomberg" Valuation Business Day: Banking Days in locations per the Business Day Location Table, plus additional days required by for fixings under the Floating Rate Option(s) Following Cash Settlement Payment Date **Business Day Convention:** Cash Settlement Method: Cash Price Cash Price—Alternate Method Par Yield Curve—Adjusted Par Yield Curve—Unadjusted Zero Coupon Yield—Adjusted Cash Settlement Currency: For single currency, same as Notional Amount, otherwise as specified in ISDA Master Agreement, or otherwise same as Notional Amount for Fixed Amount Settlement Rate: **ISDA Source/Other Price** Source/Reference Banks

#### Cap/Floor Requirements and Defaults (Cash Settlement)

Cash Settlement Reference Banks:		Fallbacks per ISDA 2006 Definitions
Quotation Rate:	bid	
	ask	
	mid	
	Exercising Party Pays (Optional	
	Early Termination Only)	

## <u> Interest Rate Swaps – ASX Cleared</u>

Summary:	This covers interest rate swaps cleared by ASX Clear (Futures) Pty Limited ("ASX") (such swaps, "Interest Rate Swaps – ASX Cleared").
Limitations on Available Selections and Default Settings:	<ul> <li>The terms under which an Interest Rate Swap – ASX</li> <li>Cleared may be traded are as specified in these terms and conditions, which incorporate the ASX OTC</li> <li>Rulebook and the ASX OTC Handbook (collectively, the "ASX Rules"), in particular Schedule 1 to the ASX</li> <li>OTC Handbook (and any successor provisions).</li> <li>By electing to trade a Single Currency Fixed for</li> <li>Floating Interest Rate Swap – ASX Cleared, participants are representing that they are familiar with the ASX Rules and the limitations on transaction terms contained therein.</li> <li>In particular, participants represent that they are familiar with the limitations on transactions for US Persons set forth in Section 4.3 of the ASX OTC</li> </ul>
Incorporated Standards:	Handbook (or any successor provisions).This contract description incorporates by reference the ASX Rules as in effect from time to time.The ASX Rules themselves may incorporate certain additional standards, such as the 2006 ISDA Definitions.Be aware that the timing of effectiveness of amendments or supplements to the ISDA standards may vary between bilateral and ASX-cleared contracts, since ASX may reserve the right to select when and how such changes become effective.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product(s):	Fixed Float, OIS and Basis
Further Limitations:	Must comply with the ASX Rules.
Terms:	
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2006, as amended) binding on the parties in accordance with the ASX Rules.
Notional Amount:	An amount in Currency determined by the parties subject to limitations in the ASX Rules.
	This may vary from period to period to the extent permitted by the ASX Rules. The ASX Rules may limit the Currencies and Floating Rate Options for which variable notionals are permitted.
Currency:	<ul> <li>This may vary from period to period to the extent permitted by the ASX Rules.</li> <li>The ASX Rules may limit the Currencies and Floating Rate Options for which variable notionals are permitted.</li> <li>One of the currencies permitted for the relevant transaction type per the ASX Rules.</li> </ul>
Currency: Business Days:	<ul> <li>This may vary from period to period to the extent permitted by the ASX Rules.</li> <li>The ASX Rules may limit the Currencies and Floating Rate Options for which variable notionals are permitted.</li> <li>One of the currencies permitted for the relevant</li> </ul>
Business Days:	<ul> <li>This may vary from period to period to the extent permitted by the ASX Rules.</li> <li>The ASX Rules may limit the Currencies and Floating Rate Options for which variable notionals are permitted.</li> <li>One of the currencies permitted for the relevant transaction type per the ASX Rules.</li> <li>As per the ASX Rules, which may require certain Business Days be applicable on a per Currency or Floating Rate Option Basis and may otherwise limit the</li> </ul>
-	<ul> <li>This may vary from period to period to the extent permitted by the ASX Rules.</li> <li>The ASX Rules may limit the Currencies and Floating Rate Options for which variable notionals are permitted.</li> <li>One of the currencies permitted for the relevant transaction type per the ASX Rules.</li> <li>As per the ASX Rules, which may require certain Business Days be applicable on a per Currency or Floating Rate Option Basis and may otherwise limit the available Business Day locations which can be elected.</li> </ul>

Termination Date:	As agreed by the parties, subject to any minimum or maximum tenor in the ASX Rules.
Termination Date Business Day Convention:	As per the ASX Rules, and thus subject to limitations
Termination Date Dusiness Day Convention.	based on other terms of the transaction.
Stub Periods:	Permitted to the extent allowed under the ASX Rules.
Fixed Rate Payer Payment Dates:	For fixed-for-floating interest rate swaps, as per the ASX
	Rules.
Fixed Amount:	For fixed-for-floating interest rate swaps, as per the ASX
	Rules.
Fixed Rate:	As agreed by the parties, subject to any minimum or
	maximum rate and per-period variability permitted in the
	ASX Rules and any other restrictions in the ASX Rules.
Floating Rate Payer Payment Dates:	For the floating leg of a fixed-for-floating interest rate
	swap or for each floating leg of a basis swap, as per the
Electing America	ASX Rules.
Floating Amount:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the
	ASX Rules.
Floating Rate Option:	For the floating leg of a fixed-for-floating interest rate
	swap or for each floating leg of a basis swap, as
	determined by the parties, subject to the ASX Rules,
	which may provide a more limited list of available
	options for a Currency than does the Definition Set.
Designated Maturity:	For the floating leg of a fixed-for-floating interest rate
	swap or for each floating leg of a basis swap, as per the
	ASX Rules, which may provide a more limited set of
	Designated Maturities than does the related rate source
Spread:	page.           For the floating leg of a fixed-for-floating interest rate
Spread.	swap or for each floating leg of a basis swap, as
	determined by the parties, subject to any minimum or
	maximum rate and per-period variability permitted by
	the ASX Rules and any other restrictions in the ASX
	Rules.
Reset Dates:	For the floating leg of a fixed-for-floating interest rate
	swap or for each floating leg of a basis swap, as per the
	ASX Rules.
Floating Rate Daycount Fraction:	For the floating leg of a fixed-for-floating interest rate
	swap or for each floating leg of a basis swap, as per the
Electing Data for Initial Coloulation Dariadu	ASX Rules. For the floating leg of a fixed-for-floating interest rate
Floating Rate for Initial Calculation Period:	swap or for each floating leg of a basis swap, as per the
	ASX Rules.
Fixed Rate Payer:	For fixed-for-floating interest rate swaps, as determined
	by the parties.
Floating Rate Payer:	For the floating leg of a fixed-for-floating interest rate
	swap or for each floating leg of a basis swap, as
	determined by the parties.
Compounding:	As per the ASX Rules.
Payer for Additional Payment/Fees:	As determined by the parties, subject to any limitations
	in the ASX Rules.
Additional Payment/Fees:	As determined by the parties, subject to any limitations
Darmont Data for Additional Darmont/Pro-	in the ASX Rules.
Payment Date for Additional Payment/Fees	As determined by the parties, subject to any limitations
	in the ASX Rules.

## Interest Rate Swaps – Eurex Cleared

Summary:	This covers interest rate swaps cleared by Eurex Clearing AG ("Eurex") (such swaps, "Interest Rate Swaps – Eurex Cleared").
Limitations on Available Selections and Default Settings:	The terms under which an Interest Rate Swap – Eurex Cleared may be traded are as specified in these terms and conditions, which incorporate the Eurex Clearing Conditions ( <i>Clearing-Bedingungen</i> ) (collectively, the "Eurex Rules").
	By electing to trade an Interest Rate Swap – Eurex Cleared, participants are representing that they are familiar with the Eurex Rules and the limitations on transaction terms contained therein.
Incorporated Standards:	This contract description incorporates by reference the Eurex Rules as in effect from time to time.
	The Eurex Rules themselves may incorporate certain additional standards, such as the 2000 ISDA Definitions, the 2006 ISDA Definitions or the <i>Rahmenvertrag für</i> <i>Finanztermingeschäfte</i> ("DRV"). <b>Be aware that the</b> <b>timing of effectiveness of amendments or</b> <b>supplements to the ISDA standards may vary</b> <b>between bilateral and Eurex-cleared contracts, since</b> <b>Eurex may reserve the right to select when and how</b> <b>such changes become effective.</b> Also be aware that <b>Eurex has elected to make the 2006 ISDA Definitions</b> <b>applicable to certain classes of transactions,</b> <b>regardless of the parties' election to use the 2000</b> <b>ISDA Definitions.</b>
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product(s):	Fixed Float, Inflation, OIS and Basis
Further Limitations:	Must comply with the Eurex Rules.
Terms:	
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2000 Definitions, ISDA 2006 Definitions, each as amended, the DRV) binding on the parties in accordance with the Eurex Rules.
Notional Amount:	An amount in Currency determined by the parties subject to limitations in the Eurex Rules.
	This may vary from period to period to the extent permitted by the Eurex Rules.
	The Eurex Rules may limit the Floating Rate Options and other terms for which variable notionals are permitted.

Currency:	One of the currencies permitted for the relevant transaction type per the Eurex Rules.
Business Days:	As per the Eurex Rules, which may require certain Business Days be applicable on a per Currency or Floating Rate Option Basis and may otherwise limit the available Business Day locations which can be elected.
Business Day Convention:	As per the Eurex Rules.
Trade Date:	As per the Eurex Rules.
Effective Date:	As per the Eurex Rules.
Termination Date:	As agreed by the parties, subject to any minimum or maximum tenor in the Eurex Rules for the related type of transaction and Currency.
Termination Date Business Day Convention:	As per the Eurex Rules, and thus subject to limitations based on other terms of the transaction.
Stub Periods:	Permitted to the extent allowed under the Eurex Rules.
Fixed Rate Payer Payment Dates:	For fixed-for-floating interest rate swaps, as per the Eurex Rules.
Fixed Amount:	For fixed-for-floating interest rate swaps, as per the Eurex Rules.
Fixed Rate:	As agreed by the parties, subject to any minimum or maximum rate and per-period variability permitted in the Eurex Rules and any other restrictions in the Eurex Rules.
Floating Rate Payer Payment Dates:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.
Floating Amount:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.
Floating Rate Option:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the parties, subject to the Eurex Rules, which may provide a more limited list of available options for a Currency than does the Definition Set.
Designated Maturity:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules, which may provide a more limited set of Designated Maturities than does the related rate source page.
Spread:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the parties, subject to any minimum or maximum rate and per-period variability permitted by the Eurex Rules and any other restrictions in the Eurex Rules.

Reset Dates:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.	
Floating Rate Daycount Fraction:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.	
Floating Rate for Initial Calculation Period:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.	
Fixed Rate Payer:	For fixed-for-floating interest rate swaps, as determined by the parties.	
Floating Rate Payer:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the parties.	
Compounding:	As per the Eurex Rules.	
Payer for Additional Payment/Fees:	As determined by the parties, subject to any limitations in the Eurex Rules.	
Additional Payment/Fees:	As determined by the parties, subject to any limitations in the Eurex Rules.	
Payment Date for Additional Payment/Fees:	As determined by the parties, subject to any limitations in the Eurex Rules.	

# Interest Rate Swaps – JSCC Cleared

Summary:	This covers interest rate swaps cleared by Japan Securities Clearing Corporation ("JSCC") (such swaps, "Interest Rate Swaps – JSCC Cleared").	
Limitations on Available Selections and Default Settings:	The terms under which an Interest Rate Swap – JSCC Cleared may be traded are as specified in these terms and conditions, which incorporate the JSCC Interest Rate Swap Clearing Business Rules	
	(金利スワップ取引清算業務に関する業務方法書)and the JSCC	
	Handling Procedures of Interest Rate Swap Business Rules	
	(金利スワップ取引清算業務に関する業務方法書の取扱い)	
	<ul> <li>(collectively, the "JSCC Rules").</li> <li>By electing to trade an Interest Rate Swap – JSCC Cleared, participants are representing that they are familiar with the JSCC Rules and the limitations on transaction terms</li> </ul>	
	contained therein.	
	In particular, participants represent that they are familiar with the limitations on transactions for US Persons set forth in Article 47-2 of the JSCC Handling Procedures of Interest Bate Swap Business Bules (on any successor provisions)	
Incorporated Standards:	Rate Swap Business Rules (or any successor provisions).This contract description incorporates by reference the JSCC	
incorporateu Standarus.	Rules as in effect from time to time.	
	The JSCC Rules themselves may incorporate certain additional standards, such as the 2000 ISDA Definitions or 2006 ISDA Definitions.	
	Be aware that the timing of effectiveness of amendments or	
	supplements to the ISDA standards may vary between	
	bilateral and JSCC-cleared contracts, since JSCC may	
	reserve the right to select when and how such changes become effective.	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Interest Rate	
ISDA OTC Base Product:	IR Swap	
ISDA OTC Sub-Product(s):	Fixed Float, OIS and Basis	
Further Limitations:	Must comply with the JSCC Rules.	
Terms:		
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2000 or ISDA 2006, each as amended) binding on the parties in accordance with the JSCC Rules.	
Notional Amount:	An amount in Currency determined by the parties subject to limitations in the JSCC Rules.	
	This may vary from period to period to the extent permitted by the JSCC Rules.	
	The JSCC Rules may limit the Currencies and Floating Rate Options for which variable notionals are permitted.	
Currency:	One of the currencies permitted for the relevant transaction type per the JSCC Rules.	
Business Days:	As per the JSCC Rules, which may require certain Business Days be applicable on a per Currency or Floating Rate Option Basis and may otherwise limit the available Business Day locations which can be elected.	

Business Day Convention:	As per the JSCC Rules.	
Trade Date:	As per the JSCC Rules.	
Effective Date:	As per the JSCC Rules.	
Termination Date:	As agreed by the parties, subject to any minimum or maximum	
Termination Date.	tenor in the JSCC Rules.	
Termination Date Business Day Convention:	As per the JSCC Rules, and thus subject to limitations based on	
Termination Date Dusiness Day Convention.	other terms of the transaction.	
Stub Periods:	Permitted to the extent allowed under the JSCC Rules.	
Fixed Rate Payer Payment Dates:	For fixed-for-floating interest rate swaps, as per the JSCC	
Fixed Kale Fayer Fayment Dates.	Rules.	
Fixed Amount:	For fixed-for-floating interest rate swaps, as per the JSCC Rules.	
Fixed Rate:	As agreed by the parties, subject to any minimum or maximum rate and per-period variability permitted in the JSCC Rules and any other restrictions in the JSCC Rules.	
Floating Rate Payer Payment Dates:	For the floating leg of a fixed-for-floating interest rate swap or	
	for each floating leg of a basis swap, as per the JSCC Rules.	
Floating Amount:	For the floating leg of a fixed-for-floating interest rate swap or	
	for each floating leg of a basis swap, as per the JSCC Rules.	
Floating Rate Option:	For the floating leg of a fixed-for-floating interest rate swap or	
routing fuite option.	for each floating leg of a basis swap, as determined by the	
	parties, subject to the JSCC Rules, which may provide a more	
	limited list of available options for a Currency than does the	
	Definition Set.	
Designated Maturity:	For the floating leg of a fixed-for-floating interest rate swap or	
Designated Maturity.	for each floating leg of a basis swap, as per the JSCC Rules,	
	which may provide a more limited set of Designated Maturities	
Caucada	than does the related rate source page.	
Spread:	For the floating leg of a fixed-for-floating interest rate swap or	
	for each floating leg of a basis swap, as determined by the	
	parties, subject to any minimum or maximum rate and per-	
	period variability permitted by the JSCC Rules and any other	
	restrictions in the JSCC Rules.	
Reset Dates:	For the floating leg of a fixed-for-floating interest rate swap or	
	for each floating leg of a basis swap, as per the JSCC Rules.	
Floating Rate Daycount Fraction:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the JSCC Rules.	
Floating Rate for Initial Calculation Period:	For the floating leg of a fixed-for-floating interest rate swap or	
routing Rate for initial calculation renou.	for each floating leg of a basis swap, as per the JSCC Rules.	
Fixed Rate Payer:	For fixed-for-floating interest rate swaps, as determined by the	
	parties.	
Floating Data Davar:	For the floating leg of a fixed-for-floating interest rate swap or	
Floating Rate Payer:		
	for each floating leg of a basis swap, as determined by the	
Compounding	parties.	
Compounding:	As per the JSCC Rules.	
Payer for Additional Payment/Fees:	As determined by the parties, subject to any limitations in the JSCC Rules.	
Additional Payment/Fees:	As determined by the parties, subject to any limitations in the	
Payment Date for Additional Payment/Fees		
Payment Date for Additional Payment/Fees	JSCC Rules.         As determined by the parties, subject to any limitations in the JSCC Rules.	

# **IOS Index Contracts**

Summary:	This covers Markit IOS Fixed for Floating Swap	
	Transactions (the "Contracts").	
Limitations on Available Selections and Default	The terms under which the Contracts may be traded are	
Settings:	as specified in these terms and conditions.	
	For amounts or rates, the relevant term cannot be less than the anacified Minimum must represent an aven	
	than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date,	
	the date cannot be earlier than Earliest nor later than	
	Latest.	
	In many cases there are normal "vanilla" terms on which	
	the parties will transact.	
	These are shown as "Default" and will apply unless the	
	parties vary them.	
Incorporated Standards:	This contract description incorporates by reference the	
-	following industry standard documentation and	
	standards:	
	(a) 2006 ISDA Definitions	
	(b) ISDA OTC Taxonomies	
	(c) the Markit IOS Standard Terms Supplement (March	
	12, 2010 version) or any subsequent Standard Terms	
	Supplement (the "Standard Terms")	
Product Type/ISDA OTC Taxonomy: ISDA OTC Asset Class:	Credit	
ISDA OTC Asset Class: ISDA OTC Base Product:	Index	
ISDA OTC Sub-Product:	IOS	
ISDA OTC Transaction Type:	IOS	
Further Limitations:	None	
Terms:	None	
Effective Date:	As specified by the parties, subject to adjustment in	
	accordance with the Standard Terms.	
Scheduled Termination Date:	As agreed by the parties.	
Termination Date:	Per the Standard Terms.	
Notional Amount:	An amount is USD agreed by the parties.	
Index:	One of the Markit IOS Index series, as specified by the	
	parties from all then-available series (to the extent such	
	series is not then a narrow-based index within the	
	meaning of the CFTC's regulations).	
Annex Date:	As agreed by the parties.	
Index Provider:	Per the Standard Terms.	
Fixed Rate Payer:	As agreed by the parties.	
Floating Rate Payer:	As agreed by the parties.	
Period End Dates:	Per the Standard Terms.	
Payment Dates:	Per the Standard Terms.	
Calculation Agent:	As agreed by the parties or, if not so agreed, per the	
Day Count Fraction	Standard Terms. Per the Standard Terms.	
Day Count Fraction:		
Business Days: Business Day Convention:	For any purpose, per the Standard Terms. Per the Standard Terms.	
Initial Payment: Initial Payment:	Per the Standard Terms.	
minuar i aymonit.	r or the Standard r offlis.	

Initial Payment Amount:	An amount in USD as specified by the parties.	
Initial Payment Payer:	As specified by the parties.	
Initial Payment Date:	Per the Standard Terms.	
Settlement Payments:		
Mark to Market Amount Payment:	Per the Standard Terms.	
Mark to Market Amount Payer:	Per the Standard Terms.	
Mark to Market Amount:	Per the Standard Terms.	
Financing Payment:	Per the Standard Terms.	
Financing Payment Amount:	Per the Standard Terms.	
Interest Payment:	Per the Standard Terms.	
Interest Payment Amount:	Per the Standard Terms.	
Net Payment:	Per the Standard Terms.	
Net Payment Amount Payer:	Per the Standard Terms.	
Net Payment Amount:	Per the Standard Terms.	
Agency Coupon:	Per the Standard Terms.	
Index LIBOR:	Per the Standard Terms.	
Index Factor:	Per the Standard Terms.	
Commencing Index Factor:	Per the Standard Terms.	
Period End Index Factor:	Per the Standard Terms.	
Index Price:	Per the Standard Terms.	
Commencing Index Price:	Per the Standard Terms.	
Period End Index Price:	Per the Standard Terms.	
Event Affecting the Index:		
Events and Adjustments:	All are per the Standard Terms.	

# **MBX Index Contracts**

Summary:	This covers Markit MBX Fixed for Floating Swap	
	Transactions (the "Contracts").	
Limitations on Available Selections and Default	The terms under which the Contracts may be traded are	
Settings:	as specified in these terms and conditions.	
	For amounts or rates, the relevant term cannot be less	
	than the specified Minimum, must represent an even	
	Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than	
	Latest.	
	In many cases there are normal "vanilla" terms on which the parties will transact.	
	These are shown as "Default " and will apply unless the	
	parties vary them.	
Incorporated Standards:	This contract description incorporates by reference the	
incorporateu Standarus.	following industry standard documentation and	
	standards:	
	(a) 2006 ISDA Definitions;	
	(b) ISDA OTC Taxonomies; and	
	(c) the Markit MBX Standard Terms Supplement	
	(September 12, 2010 version) or any subsequent	
	Standard Terms Supplement (the "Standard	
	Terms").	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Credit	
ISDA OTC Base Product:	Index	
ISDA OTC Sub-Product:	MBX	
ISDA OTC Transaction Type:	MBX	
Further Limitations:	None	
Terms:		
Effective Date:	As specified by the parties, subject to adjustment in	
	accordance with the Standard Terms.	
Scheduled Termination Date:	As agreed by the parties.	
Termination Date:	Per the Standard Terms.	
Notional Amount:	An amount is USD agreed by the parties.	
Index:	One of the Markit MBX Index series, as specified by the	
	parties from all then-available series (to the extent such	
	series is not then a narrow-based index within the	
	meaning of the CFTC's regulations).	
Annex Date:	As agreed by the parties.	
Index Provider:	Per the Standard Terms.	
Fixed Rate Payer:	As agreed by the parties.	
Floating Rate Payer:	As agreed by the parties.	
Period End Dates:	Per the Standard Terms.	
Reset Dates:	Per the Standard Terms	
Payment Dates:	Per the Standard Terms.	
Calculation Agent:	As agreed by the parties or, if not so agreed, per the Standard Terms.	
Day Count Fraction:	Per the Standard Terms.	
Business Days:	For any purpose, per the Standard Terms.	
Business Day Convention:	Per the Standard Terms.	

Initial Payment:		
Initial Payment:	Per the Standard Terms.	
Initial Payment Amount:	An amount in USD as specified by the parties.	
Initial Payment Payer:	As specified by the parties.	
Initial Payment Date:	Per the Standard Terms.	
Settlement Payments:		
Mark to Market Amount Payment:	Per the Standard Terms.	
Mark to Market Amount Payer:	Per the Standard Terms.	
Mark to Market Amount:	Per the Standard Terms.	
Financing Payment:	Per the Standard Terms.	
Financing Payment Amount:	Per the Standard Terms.	
Interest Payment:	Per the Standard Terms.	
Interest Payment Amount:	Per the Standard Terms.	
Principal Payment:	Per the Standard Terms.	
Principal Payment Amount:	Per the Standard Terms.	
Net Payment:	Per the Standard Terms.	
Net Payment Amount Payer:	Per the Standard Terms.	
Net Payment Amount:	Per the Standard Terms.	
Agency Coupon:	Per the Standard Terms.	
Index LIBOR:	Per the Standard Terms.	
Index Factor:	Per the Standard Terms.	
Commencing Index Factor:	Per the Standard Terms.	
Period End Index Factor:	Per the Standard Terms.	
Index Price:	Per the Standard Terms.	
Commencing Index Price:	Per the Standard Terms.	
Period End Index Price:	Per the Standard Terms.	
Event Affecting the Index:		
Events and Adjustments:	All are per the Standard Terms.	

# **Municipal Market Data Rate Lock Transactions**

Summary:	This covers rate lock transactions indexed to the
	Thomson Reuters Municipal Market Data ("MMD")
	AAA Curve ("MMD Rate Lock Transactions").
Limitations on Available Selections and Default	The terms under which a MMD Rate Lock Transaction
Settings:	may be traded are as specified in these terms and
	conditions and in the attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations
	specified.
	The parties may add additional locations from the
	Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made.
	For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which
	the parties will transact.
	These are shown as "Default" and will apply unless the
	parties vary them.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions
	(b) ISDA OTC Taxonomies
	(c) FpML Location Codes
	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Exotic
Further Limitations:	None
Terms:	
Notional Amount ("notional"):	An amount in USD agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Effective Date as
	a number of Business Days or Banking Days from the
	Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available
	Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Termination
	Date as a number of days, months or years from the
	Effective Date ("relativeTerminationDate").

Termination Date Business Day Convention:	As specified by the parties from among the Available	
	Business Day Conventions.	
DV01:	As specified by the parties.	
Fixed Amount:		
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.	
Currency Amount ("notionalAmount"):	As specified by the parties.	
Fixed Amount:	Notwithstanding anything to the contrary contained in the 2006 ISDA Definitions, the Fixed Amount shall	
	equal:	
	Amount × Day Count Fraction	
Fixed Rate Payment Dates ("unadjustedPaymentDate"):	The Termination Date	
Day Count Fraction:	1/1	
Floating Amount:		
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.	
Currency Amount ("notionalAmount"):	As specified by the parties.	
Floating Amount:	Notwithstanding anything to the contrary contained in	
	the 2006 ISDA Definitions, the Floating Amount shall	
	equal:	
DV01 × Calculation Amount × (Floating Rate	+ Spread) × Floating Rate Day Count Fraction	
Payment Dates ("unadjustedPaymentDate"):	The Termination Date	
Relevant Rate:	The Relevant Rate for a Reset Date will be the level of	
	the Thomson Reuters Municipal index for a tenor of the	
	Designated Maturity which represents the offer-side of	
	5.00% coupon "AAA" rated state general obligation	
	bonds based on institutional block size (\$2 million+)	
	market activity in both the primary and secondary	
	municipal bond market, as of at 3:00 p.m. eastern	
	standard time as published on the Thomson Reuters	
	TM3 page.	
Designated Maturity ('indexTenor")	As specified by the parties from among the available	
	tenors.	
Spread:	Zero	
Day Count Fraction:	1/1	
Reset Dates ("resetDate"):	The second Business Day preceding the Floating Rate	
	Payment Date.	
Reset Dates Business Days:	As specified by the parties from among the Available	
•	Business Days, subject to any Required Business Days.	
Reset Dates Business Day Convention:	As specified by the parties from among the Available	
	Business Day Conventions.	
Calculation Agent:	As agreed by the parties.	

# Fixed Floating Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY

### Fixed Floating Available Business Day Conventions

ISDA Name	
Following	
Modified/Modified Following	
No Adjustment	
Preceding	
FRN Convention/Eurodollar Convention	

#### Notional Amounts

Currency	Minimum	Increment	Maximum	Default
USD	25,000,000	1,000,000	N/A	N/A

### Natural Gas Date/Instrument Spread Contracts

Summary:	This covers "Natural Gas Date/Instrument Spread Contracts".	
	A natural-gas date/instrument spread contract is a cash-settled agreement	
	between two counterparties whereby one counterparty agrees to pay a	
	floating amount to the other counterparty on a given date, and then	
	receive a different floating amount from the other counterparty on a different, later date.	
	The difference between the two floating amounts is the spread, which is	
	the quoted price for the contract.	
	The floating amounts are based on the notional quantity traded and the	
	price of natural gas a stated hub published by one of a series of industry.	
Publication Sources:	CGPR—Canadian Gas Price Reporter	
	<ul> <li>Gas Daily—Platt's Gas Daily's Daily Report</li> </ul>	
	IFERC—Platt's Inside FERC Gas Market Reporter	
	NGI—Natural Gas Intelligence's Bidweek Survey	
	The floating amount can be based on the price for a given period in a	
	given issue of the publication source ( <i>e.g.</i> , monthly based on the first	
	issue of the month) or an average of prices (e.g., average of weekly	
	bid prices for each weekly issue), as agreed by the parties.	
Reference Commodities:	• AECO—Alberta Energy Co. (CGPR)	
	• ALG—Algonquin Energy Co. (IFERC)	
	<ul> <li>Chicago—Chicago City Gate (IFERC)</li> </ul>	
	<ul> <li>CIG—Colorado Interstate Gas, North Mainline (IFERC)</li> </ul>	
	<ul> <li>DOM—Dominion Transmission Co. (IFERC)</li> </ul>	
	Malin—Pacific Gas Transmission Co., Malin (IFERC)     Michigan Michigan Complicated Configuration	
	<ul> <li>Michigan—Michigan Consolidated Gas Company Citygate (IFERC)</li> </ul>	
	• NGPC Mid Con—Natural Gas Pipeline Co of America (IFERC)	
	• Panhandle—Panhandle Eastern Pipeline Co. (IFERC)	
	• Permian—El Paso Natural Gas Co. Permian Basin Pool (IFERC)	
	<ul> <li>PG&amp;E Citygate—PG&amp;E Citygate (IFERC)</li> </ul>	
	<ul> <li>Rockies—Northwest Pipeline, Rocky Mountain Pool (IFERC)</li> </ul>	
	<ul> <li>San Juan— El Paso Natural Gas Co. San Juan Basin Pool (IFERC)</li> </ul>	
	Socal—Socal Citygate (IFERC)     Summer Northward Pingling Summer (IFERC)	
	• Sumas—Northwest Pipeline, Sumas (IFERC)	
	• TCO—Columbia Gas Transmission Company (IFERC)	
	• TETCO M3—Texas Eastern Transmission Corp M3 Zone (IFERC)	
	• Texok— Natural Gas Pipeline Co of Americak TexOK (IFERC)	
	• Trans Z6 NY—Transcontinenal Gas Pipeline, Zone 6 (NY)	
	(IFERC)	
	• Ventura—Northern Border Pipeline, Ventura (IFERC)	
	• Waha—Waha Hub, West Texas (IFERC)	
Settlement Currency:	Currency in which payments are made between the two counterparties:	
	• USD	
	• CAD (AECO only)	
Quoting Convention and Minimum	Notional amount, as agreed by counterparties.	
Increment:		
Minimum Size:	Notional amount, as agreed by counterparties.	

Notional Currency:	Currency in which payments are made between the two counterparties:
	• USD
	• CAD (AECO only)
Trading Conventions:	Buy or Sell on the near leg and Buy or Sell on the far leg.
	These would be reversed so that if the first leg is buying the second leg
	must be selling, for instance.
Calculation Periods:	Two calculation periods – one for each leg of the spread.
	A single date or date range over which the reference price of the
	commodity will be calculated.
	If a date range the reference price will be averaged across the days,
	contracts or publication source issues as agreed by the counterparties.
Settlement Date(s):	Specified settlement or payment date when the floating amounts are
	exchanged.
Settlement Procedure:	Bilateral cash settlement performed in settlement currency.

# <u>Natural Gas – Financial Basis Swap Contracts</u>

Summary:	This covers "Natural Gas – Financial Basis Swap Contracts".	
	A natural gas financial basis swap contract is a cash settled agreement between two	
	counterparties whereby one counterparty agrees to pay a floating amount to the	
	other counterparty on a given date(s), which floating amount is calculated based on	
	the reported price for natural gas at a given hub, and in exchange, the second	
	counterparty will pay a floating amount to the first counterparty on the same given	
	date(s) based on the maturity price of a natural gas futures contract tied to a	
	different hub.	
	The floating amounts paid are determined based on the notional quantity and, in the case of the first floating amount, the price of natural gas a stated hub published by one of a series of industry publications and, in the case of the second floating	
	amount, an applicable futures contract based on the reference commodity.	
Publication Sources:	CGPR—Canadian Gas Price Reporter	
	<ul> <li>Gas Daily—Platt's Gas Daily's Daily Report</li> </ul>	
	IFERC—Platt's Inside FERC Gas Market Reporter	
	<ul> <li>NGI—Natural Gas Intelligence's Bidweek Survey</li> </ul>	
	The floating amount can be based on the price for a given period in a given issue of	
	the Publication Source (e.g., monthly based on the first issue of the month) or an	
	average of prices (e.g., average of weekly bid prices for each weekly issue), as	
	agreed by the parties.	
<b>Reference Commodities:</b>	• AECO—Alberta Energy Co. (CGPR)	
	• ALG—Algonquin Energy Co. (IFERC)	
	Chicago—Chicago City Gate (IFERC)	
	CIG—Colorado Interstate Gas, North Mainline (IFERC)	
	DOM—Dominion Transmission Co. (IFERC)	
	HSC—Houston Ship Channel (IFERC)	
	<ul> <li>Malin—Pacific Gas Transmission Co., Malin (IFERC)</li> </ul>	
	<ul> <li>Michigan—Michigan Consolidated Gas Company Citygate (IFERC)</li> </ul>	
	<ul> <li>NGPC Mid Con—Natural Gas Pipeline Co of America (IFERC)</li> </ul>	
	<ul> <li>Panhandle—Panhandle Eastern Pipeline Co. (IFERC)</li> </ul>	
	-	
	Permian—El Paso Natural Gas Co. Permian Basin Pool (IFERC)	
	• PG&E Citygate—PG&E Citygate (IFERC)	
	Rockies—Northwest Pipeline, Rocky Mountain Pool (IFERC)	
	San Juan— El Paso Natural Gas Co. San Juan Basin Pool (IFERC)	
	Socal—Socal Citygate (IFERC)	
	• Sumas—Northwest Pipeline, Sumas (IFERC)	
	TCO—Columbia Gas Transmission Company (IFERC)	
	TETCO M3—Texas Eastern Transmission Corp M3 Zone (IFERC)	
	Texok— Natural Gas Pipeline Co of Americak TexOK (IFERC)	
	• Trans Z6 NY—Transcontinenal Gas Pipeline, Zone 6 (NY) (IFERC)	
	• Ventura—Northern Border Pipeline, Ventura (IFERC)	
	• Waha—Waha Hub, West Texas (IFERC)	
Contracts on Reference	NYMEX Henry Hub Natural Gas (Index Swap Future) Last Day Settlement	
Commodities:	For transactions where the settlement currency is CAD, this price will be converted	
	to CAD at then-current spot.	
Settlement Currency:	Currency in which payments are made between the two counterparties:	
	<ul> <li>USD</li> </ul>	
	• CAD (AECO only)	
Quoting Convention	Notional amount, as agreed by counterparties.	
Zuonng Convention	rotonar amount, as agreed by counterparties.	

and Minimum	
Increment:	
Minimum Size:	Notional amount, as agreed by counterparties.
Notional Currency:	Currency in which the fixed and floating prices are quoted:
	• USD
	• CAD (AECO only)
Trading Conventions:	Buy or Sell which refers to whether or not the non-futures based floating amount is
	paid (buy) or received (sell).
Calculation Period:	A single date or date range over which the reference price of the commodity will be
	calculated.
	If a date range the reference price will be averaged across the days, contracts or
	Publication Source issues as agreed by the counterparties.
Trade Date:	The date on which counterparties enter into the contract.
Settlement Date(s):	Specified settlement or payment date(s) when the fixed payment amount and the
	floating payment amount are exchanged (can be netted).
Settlement Procedure:	Bilateral cash settlement performed in settlement currency.

# Natural Gas – Fixed/Floating Swap Contracts

Summary:	This covers "Natural Gas – Fixed/Floating Swap Contracts".		
	A fixed/floating natural gas swap contract is a cash settled agreement between		
	two counterparties whereby one counterparty agrees to pay a fixed amount to		
	the other counterparty on a given date, and in exchange the second counterparty will pay a floating amount to the first counterparty on the same given date.		
	The fixed amount paid is determined based on the notional quantity traded and		
	the price of the reference commodity.		
	The floating amount paid is determined based on the notional quantity and the		
	price of an applicable futures contract based on the reference commodity over		
	an agreed future calculation period.		
<b>Reference Commodities:</b>	Henry Hub Natural Gas		
	Waha Natural Gas		
	Permian Natural Gas Basis Swap		
	TTF Natural Gas		
Contracts on Reference	NYMEX Henry Hub Natural Gas (Index Swap Future)		
Commodities:	<ul> <li>NYMEX Waha Natural Gas Basis Swap</li> </ul>		
commountes.	<ul> <li>NYMEX Permian Natural Gas Basis Swap</li> </ul>		
	<ul> <li>ICE TTF Natural Gas (Monthly)</li> </ul>		
Settlement Currency:	Currency in which payments are made between the two counterparties:		
Settlement Currency:	<ul> <li>USD (Other than TTF)</li> </ul>		
	• EUR (TTF)		
Quoting Convention and	Notional amount, as agreed by counterparties		
Minimum Increment:			
Minimum Size:	Notional amount, as agreed by counterparties		
Notional Currency:	Currency in which the fixed and floating prices are quoted:		
	• USD (Other than TTF)		
	• EUR (TTF)		
Trading Conventions:	Buy or Sell which refers to whether or not the fixed amount is paid (buy) or		
	received (sell).		
Calculation Periods:	A single date or date range over which the reference price of the commodity will		
	be calculated.		
	If a date range the reference price will be averaged across all days.		
Trade Date:	The date on which counterparties enter into the contract.		
Settlement Date(s):	Specified settlement or payment date when the fixed payment amount and the		
	floating payment amount are exchanged (can be netted).		
Settlement Procedure:	Bilateral cash settlement performed in settlement currency.		
	The contracts settle on both the NYMEX Last Day and NYMEX Penultimate		
	publications.		

# <u>Natural Gas – Swing Swap Contracts</u>

Cummonrie	This covers "Natural Gas – Swing Swap Contracts".
Summary:	
	A natural gas swing swap contract is a cash settled agreement between two
	counterparties whereby one counterparty agrees to pay a floating amount to the
	other counterparty on a given date(s), which floating amount is calculated
	based on the daily reported price for natural gas at a given hub, and in
	exchange the second counterparty will pay a floating amount to the first
	counterparty on the same given date(s) based on the price at the same hub
	reported for a different period (e.g., weekly or monthly).
	The floating amounts paid are determined based on the notional quantity and,
	in the case of the first floating amount, the daily price of natural gas a stated
	hub published by one of a series of industry publications and, in the case of the
	second floating amount, a price of natural gas the same hub published with
	respect to a different periodicity.
Publication Sources (Non-Daily):	CGPR—Canadian Gas Price Reporter
i ubication Sources (Non-Dany).	-
	IFERC—Platt's Inside FERC Gas Market Reporter
	NGI—Natural Gas Intelligence's Bidweek Survey
	The floating amount can be based on the price for a given period in a given
	issue of the Publication Source (e.g., monthly based on the first issue of the
	month) or an average of prices (e.g., average of weekly bid prices for each
	weekly issue), as agreed by the parties.
Publication Sources (Daily):	<ul> <li>Gas Daily –Platt's Gas Daily's Daily Report</li> </ul>
<b>Reference Commodities and Non-</b>	AECO—Alberta Energy Co. (CGPR)
Daily Publication Source:	• ALG—Algonquin Energy Co. (IFERC)
	<ul> <li>Chicago—Chicago City Gate (IFERC)</li> </ul>
	<ul> <li>CIG—Colorado Interstate Gas, North Mainline (IFERC)</li> </ul>
	DOM—Dominion Transmission Co. (IFERC)
	• HSC—Houston Ship Channel (IFERC)
	<ul> <li>Malin—Pacific Gas Transmission Co., Malin (IFERC)</li> </ul>
	<ul> <li>Michigan—Michigan Consolidated Gas Company Citygate (IFERC)</li> </ul>
	• NGPC Mid Con—Natural Gas Pipeline Co of America (IFERC)
	Panhandle—Panhandle Eastern Pipeline Co. (IFERC)
	<ul> <li>Permian—El Paso Natural Gas Co. Permian Basin Pool (IFERC)</li> </ul>
	<ul> <li>PG&amp;E Citygate—PG&amp;E Citygate (IFERC)</li> </ul>
	Rockies—Northwest Pipeline, Rocky Mountain Pool (IFERC)
	• San Juan— El Paso Natural Gas Co. San Juan Basin Pool (IFERC)
	• Socal—Socal Citygate (IFERC)
	<ul> <li>Sumas—Northwest Pipeline, Sumas (IFERC)</li> </ul>
	TCO—Columbia Gas Transmission Company (IFERC)
	• TETCO M3—Texas Eastern Transmission Corp M3 Zone (IFERC)
	• Texok— Natural Gas Pipeline Co of Americak TexOK (IFERC)
	• Trans Z6 NY—Transcontinenal Gas Pipeline, Zone 6 (NY) (IFERC)
	<ul> <li>Ventura—Northern Border Pipeline, Ventura (IFERC)</li> </ul>
G. 441	Waha—Waha Hub, West Texas (IFERC)
Settlement Currency:	Currency in which payments are made between the two counterparties:
	• USD
	• CAD (AECO only)
Quoting Convention and	Notional amount, as agreed by counterparties.
Minimum Increment:	
Minimum Size:	Notional amount, as agreed by counterparties.

Notional Currency:	Currency in which the fixed and floating prices are quoted:	
	• USD	
	CAD (AECO only)	
Trading Conventions:	Buy or Sell which refers to whether or not the non-daily price based floating	
	amount is paid(buy) or received (sell).	
Calculation Period:	The reference price may be averaged across the days, contracts or publication	
	source issues as agreed by the counterparties.	
Trade Date:	The date on which counterparties enter into the contract.	
<b>Settlement Date(s):</b> Specified settlement or payment date(s) when the fixed payment		
	the floating payment amount are exchanged (can be netted).	
Settlement Procedure:	Bilateral cash settlement performed in settlement currency.	

# Non-Deliverable Swaps

Cummour:	This covers non deliverable single symposed and
Summary:	This covers non-deliverable single-currency swaps
	("Non-Deliverable Single-Currency Swaps") and non-
	deliverable cross-currency swaps ("Non-Deliverable
	Cross-Currency Swaps" and, together with Non-
	Deliverable Single-Currency Swaps, "Non-Deliverable
	Swaps").
Limitations on Available Selections and Default	The terms under which Non-Deliverable Single-
Settings:	Currency Swaps and Non-Deliverable Cross-Currency
	Swaps may be traded are as specified in these terms and
	conditions or in the attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	For Business Days, the defaults shall be the locations
	specified.
	The parties may add additional locations from the
	Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	•
	location in which payment may be made.
	For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which
	the parties will transact.
	These are shown as "Default" and will apply unless the
	parties vary them.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions (including Supplement 31
	thereto);
	(b) ISDA OTC Taxonomies;
	(c) FpML Location Codes;
	(d) the ISDA/EMTA 1998 FX and Currency Option
	Definitions ("1998 Definitions");
	(e) the EMTA Non-Deliverable Forward Templates;
	(f) the EMTA-ISDA Market Practice for Non-
	Deliverable CLP "Cámara" (CLP TNA) Interest
	Rate Swap Transactions ("CLP TNA Best
	Practices");
	(g) the Recommended EMTA-ISDA Market Practice
	for BRL CDI Non-Deliverable Interest Rate Swap
	Transactions (Amended March 13, 2009) ("BRL
	CDI Best Practices");
	(h) The current ISDA Revised Non-Deliverable Swap
	Transaction Standard Terms Supplement ("Asian
	STS"); and
	Transaction Fallback Matrix (the "Asian Matrix," and, together with the Asian STS, the "Asian
	and together with the Asian NIN the "Asian
	Terms").

	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Exotic
Further Limitations:	None
Terms:	
Settlement Currency:	With respect to Non-Deliverable Single-Currency
	Swaps, USD.
	With respect to any Non-Deliverable Cross-Currency
	Swap, for any currency pair selected by the parties from
	among those specified in the list of Available Currency
	Pairs, the currency specified as such in that list.
Index Currency:	With respect to any Non-Deliverable Single-Currency
	Swaps, the currency elected by the parties from among
	those specified in the list of Available Single Currencies.
	With respect to any Non-Deliverable Cross-Currency
	Swaps, for any currency pair selected by the parties from
	among those specified in the list of Available Currency Pairs, the currency specified as such in that list.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance
Effective Date ( effectiveDate ).	with any applicable Business Day Convention.
	The parties may express the unadjusted Effective Date as
	a number of Business Days or Banking Days from the
	Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available
Effective Dute Dusifiess Duys.	Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Termination
	Date as a number of days, months or years from the
	Effective Date ("relativeTerminationDate").
Termination Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
FX Rate:	The amount of Index Currency corresponding to one unit
	of the Settlement Currency.
	The FX Rate will be determined on the date determined
	as specified for the relevant Available Single Currency
	or Available Currency Pair and in accordance:
	(a) in the case of Index Currencies not identified as
	subject to Asian Terms, with the specified NDF Template and Rate Sources and Fallback Rates, treating
	the scheduled date of determination of the FX Rate as
	the "Valuation Date" under the NDF Template; and
	(b) in the case of Index Currencies identified as subject
	to Asian Terms, in accordance with the Asian Terms.
Fixed Amount:	
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notional"):	For any Non-Deliverable Single-Currency Swap
,	Transaction or for any Non-Deliverable Cross-Currency
	Swap Transaction involving ARS or PEN, an amount in
	the Index Currency agreed by the parties.

	For any other Non-Deliverable Cross-Currency Swap
	Transaction, an amount in the Index Currency or
	Settlement Currency agreed by the parties.
Fixed Amount:	If the Currency Amount is denominated in the
Tixed Amount.	Settlement Currency, an amount calculated in
	accordance with the 2006 ISDA Definitions.
	If the Currency Amount is not denominated in the
	Settlement Currency and the Index Currency is not
	identified as being subject to Asian Terms, then
	notwithstanding anything to the contrary contained in
	the 2006 ISDA Definitions, the Fixed Amount shall
	equal an amount in the Settlement Currency equal to:
FX Rate × Fired Rate × Curren	cy Amount × Day Count Fraction
	If the Currency Amount is not denominated in the
	Settlement Currency and the Index Currency is
	identified as being subject to Asian Terms, then the
	Fixed Amount shall be calculated in accordance with the
	Asian Terms.
Fixed Rate Period End Dates:	As specified by the parties, subject to adjustment in
	accordance with any Fixed Rate Payer Period End Date
	Business Day Convention.
Fixed Rate Payer Period End Date Business Days:	If a Fixed Rate Payer Period End Date Business Day
	Convention is applicable, as specified by the parties
	from among the Available Business Days.
Fixed Rate Payer Payment Date Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
	If "No Adjustment" is specified, then the Fixed Rate
	Payer Period End Dates will not be adjusted.
Fixed Rate Payment Dates:	As specified by the parties, subject to adjustment in
	accordance with the Fixed Rate Payer Payment Date
	Business Day Convention.
Fixed Rate Payer Payment Date Business Days:	As specified by the parties from among the Available
	Business Days.
Fixed Rate Payer Payment Date Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Day Count Fraction:	As specified by the parties from among the Available
	Day Count Fractions.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notional"):	For any Non-Deliverable Single-Currency Swap
	Transaction, an amount in the Index Currency agreed by
	the parties.
	For any Non-Deliverable Cross-Currency Swap, an
	amount in the Settlement Currency agreed by the parties.
	For any other Non-Deliverable Cross-Currency Swap, an
	amount agreed by the parties in whichever of the Index
	Currency or Settlement Currency is not the currency in
	which the Fixed Rate Payer Currency Amount is
	denominated.
Floating Amount:	If the Currency Amount is denominated in the
	Settlement Currency, an amount calculated in
	accordance with the 2006 ISDA Definitions.
	If the Currency Amount is denominated in BRL, then
	notwithstanding anything to the contrary contained in
	the 2006 ISDA Definitions, the Floating Amount shall

	Payer Final Exchange Amount.
Fixed Rate Payer Final Exchange Amount:	If the Fixed Rate Payer Final Exchange Amount is denominated in the Settlement Currency, the Fixed Rate
Eined Date Davies Einel Enchange Amount	Business Day Conventions.
Final Exchange Business Day Convention:	As specified by the parties from among the Available
	Business Days.
Final Exchange Business Days:	As specified by the parties from among the Available
Final Exchange Date:	As specified by the parties.
Final Exchange:	
Method of Averaging:	As specified by the parties.
Compounding:	Day Count Fractions. As specified by the parties.
Day Count Fraction:	As specified by the parties from among the Available
Floating Rate Payer Payment Date Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Floating Rate Payer Payment Date Business Days:	As specified by the parties from among the Available Business Days.
Floating Rate Payment Dates:	As specified by the parties, subject to adjustment in accordance with the Floating Rate Payer Payment Date Business Day Convention.
Electing Data Dermart Datas	If "No Adjustment" is specified, then the Floating Rate Payer Period End Dates will not be adjusted.
Floating Rate Payer Payment Date Day Convention:	from among the Available Business Days. As specified by the parties from among the Available Business Day Conventions.
Floating Rate Payer Period End Date Business Days:	If a Floating Rate Payer Period End Date Business Day Convention is applicable, as specified by the parties
Floating Rate Period End Dates:	As specified by the parties, subject to adjustment in accordance with any Floating Rate Payer Period End Date Business Day Convention.
·	Business Day Conventions.
Reset Dates Business Day Convention:	Business Days, subject to any Required Business Days. As specified by the parties from among the Available
Reset Dates Business Days:	As specified by the parties from among the Available
Reset Dates ("resetDate"):	As specified by the parties.
Spread:	As specified by the parties.
Designated Maturity ('indexTenor"):	As specified by the parties from among the available tenors.
Floating Rate Option:	For the relevant Currency, as selected by the parties from among the Available Floating Rate Options for such Currency.
Electing Bote Option	If the Currency Amount is not denominated in the Settlement Currency and the Index Currency is identified as being subject to Asian Terms, then the Floating Amount shall be calculated in accordance with the Asian Terms.
FX Rate × Currency Amount × (Floating Rate	+ Spread) × Floating Rate Day Count Fraction
	not identified as being subject to Asian Terms, then notwithstanding anything to the contrary contained in the 2006 ISDA Definitions, the Floating Amount shall equal an amount in the Settlement Currency equal to:
	Floating Rate Option. If the Currency Amount is not denominated in the Settlement Currency or BRL and the Index Currency is
	be calculated as set forth under Definition of BRL

	If the Fined Date Daven Final Enchance Amount is
	If the Fixed Rate Payer Final Exchange Amount is
	denominated in the Index Currency and the Index
	Currency is not identified as being subject to Asian
	Terms, an amount in the Settlement Currency equal to:
$FX Rate \times Cu$	urrency Amount
	If the Fixed Rate Payer Final Exchange Amount is not
	denominated in the Settlement Currency and the Index
	Currency is identified as being subject to Asian Terms,
	then the Fixed Rate Payer Final Exchange Amount shall
	be calculated in accordance with the Asian Terms.
Floating Rate Payer Final Exchange Amount:	If the Floating Rate Payer Final Exchange Amount is
	denominated in the Settlement Currency, the Floating
	Rate Payer Final Exchange Amount.
	If the Floating Rate Payer Final Exchange Amount is
	denominated in the Index Currency and the Index
	Currency is not identified as being subject to Asian
	Terms an amount in the Settlement Currency equal to:
FX Rate × Cu	irrency Amount
	If the Floating Rate Payer Final Exchange Amount is not
	denominated in the Settlement Currency and the Index
	Currency is identified as being subject to Asian Terms,
	then the Floating Rate Payer Final Exchange Amount
	shall be calculated in accordance with the Asian Terms.
	shan of carculated in accordance with the Asian Tennis.

Non-Deliverable Swap Settlement Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY

#### Non-Deliverable Swap Available Currencies

Index Currency	NDF Template	Rate Source	Fallback Rate Source(s) (in order)	Determination Date	Business Days
INR	N/A	N/A	N/A	N/A	INMU
MYR	N/A	N/A	N/A	N/A	MYKL
THB	N/A	N/A	N/A	N/A	THBA

Non-Deliverable Cross-Currency Swap Available Currency Pairs

Index	Settlement	NDF	Rate Source	Fallback Rate	Determination	Business
Currency	Currency	Template		Source(s) (in	Date	Days
				order)		
ARS	USD	17 May 06	ARS03	ARS04	Payment – 2	ARBA
					BD	USNY
BRL	USD	17 May 06	BRL09	BRL12,	Payment – 2	USNY and
				BRL13	BD	any of
						BR{SP,RJ,
						BR}
CLP	USD	01 Aug 06	CLP10	CLP11	Payment – 2	CLSA
					BD	USNY
COP	USD	01 Aug 06	COP02	COP03	Payment – 2	USNY
					BD	COBO
PEN	USD	03 Dec 07	PEN05	PEN04	Payment – 2	USNY

		BD	PELI

Index Currency	Asian Terms
ARS	Not Applicable
BRL	Not Applicable
CLP	Not Applicable
СОР	Not Applicable
INR	Applicable
MYR	Applicable
PEN	Not Applicable
THB	Applicable

#### Applicability of Asian Terms

### Non-Deliverable Swap Floating Rate Options

Index Currency	Floating Rate Option	Defined In	Business Days
ARS	Not Applicable—Fixed Leg ONLY		ARBA
			USNY
BRL	BRL-CDI-CETIP	See below	USNY and any of
			BR{SP,RJ, BR}
CLP	CLP-Indice Cámara	CLP TNA Best Practices	USNY
	Promedio (ICP)		CLSA
CLP	CLP-Unidad de Fomentos	See below	USNY
	(UF/CLF)		CLSA
COP	COP-IBR-OIS-	ISDA 2006	USNY
	COMPOUND		СОВО
COP	COP-Unidad de Valor Real	See below	USNY
	(UVR)		СОВО
INR	INR-FBIL-MIBOR-OIS-	ISDA 2006	INMU
	COMPOUND		
INR	INR-MITOR-OIS-	ISDA 2006	INMU
	COMPOUND		
MYR	MYR-KLIBOR-BNM	ISDA 2006	MYKL
PEN	Not Applicable—	Fixed Leg ONLY	USNY
			PELI
THB	THB-THBFIX-Reuters	ISDA 2006	THBA
USD	Any USD Floating Rate	See tpSEF's Fixed/Floating	See tpSEF's
	Option available under	Swap Listing	Fixed/Floating Swap
	tpSEF's Fixed/Floating		Listing
	Swap Listing		

### Definition of BRL Floating Rate Option

Floating Amount:	Notwithstanding anything to the contrary
FX Rate × Currenc	$xy Amount \times \left[\prod_{j=1}^{N} \left(1 + \frac{Relevant Rate_j}{252}\right) - 1\right]^{252/N}$
	Where:
	N=number of Reset Dates in the Calculation Period
	j=a particular Reset Date
	<i>Relevant Rate</i> =the Relevant Rate for instance <i>j</i> of Reset Date
BRL-CDI-CETIP:	For any Reset Date, the Overnight Brazilian Interbank Deposit
	Rate Annualized, known as the average ("Media") of the

<ul> <li>DIOVER- EXTRA Group as published by CETIP (<i>Câmara de Custódia e Liquidação</i>) (the "Overnight CDI Rate") for such date; provided that (i) such rate is published not later than 12:00 p.m. on the Brazil Business Day next following such Reset Date and (ii) any adjustments made by CETIP to such rate at any time later than the end of the business day on such Reset Date shall not be taken into account.</li> <li>If for any Reset Date there is no published Overnight CDI Rate (including as a result of the proviso above), CDI for the relevant Reset Date will be the overnight deposit rate published for such date by the BM&amp;F in accordance with its rules (see http://www.bmf.com.br/portal/pages/boletim1/bd_manual/indica doreFinanceiros1.asp, or any successor page).</li> <li>If the BM&amp;F does not publish such a rate for such date, CDI for the relevant Reset Date shall be determined jointly by the parties.</li> <li>If the parties do not agree on a determined jointly by the parties.</li> <li>If CDI for a Reset Date is not so determined by a CDI Reference Dealer Poll, BRL-CDI-Reference Dealers shall apply.</li> <li>If applicable for a Reset Date as set forth above, the Calculation Agent shall conduct up to four dealer polls commencing on the Brazil Business Day following the relevant Reset Date, in each case by requesting each of the CDI Reference Dealers to provide a quotation of the CDI.</li> <li>If at least four such quotations are obtained from CDI Reference Dealers in any such poll, the highest and lowest quotations will be disregarded and CDI for the relevant Reset Date will equal the arithmetic mean of the remaining quotations.</li> <li>If fewer than four such quotations are obtained from a poll, the Calculation Agent shall conduct and the remaining quotations.</li> </ul>
Calculation Agent shall conduct additional such polls until four such quotations are obtained in any poll; provided that the Calculation Agent shall not conduct more than four polls in the aggregate (with not more than two polls on any day and with such polls conducted over not more than two Brazil Business
Days). If four quotations are not obtained from any of such four polls, CDI shall CDI shall not be determined by a CDI Reference Dealer Poll.
At least six and not more than eight leading onshore dealers in the CDI market selected by the Calculation Agent.
Each Scheduled Reset Date (as defined in the BRL CDI Best Practices).
As specified by the parties from among the Available BR Business Days.
Any of BR{SP,RJ, BR} and not otherwise declared a financial market holiday by the BM&F.
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### Definition of CLP-Unidad de Fomento (UF/CLF)

CLP-Unidad de Fomento (UF/CLF):	For any Reset Date, the difference between the value of the
	unidad de fomento (UF/CLF) as certified by the Chilean Banco
	Central de Chile for the calendar day preceding such Reset Date

and the value of the <i>unidad de fomento</i> ( <i>UF/CLF</i> ) as certified by
the Chilean Banco Central de Chile for such Reset Date.
The Calculation Agent shall convert such difference to the
appropriate annualized percentage based on the terms of the
Floating Amount payable by reference to the CLP-Unidad de
Fomento (UF/CLF).
If for any Reset Date there is no published value of the <i>unidad</i>
<i>de fomento (UF/CLF)</i> as certified by the Chilean <i>Banco Central</i>
de Chile, the Calculation Agent shall determine the CLP-Unidad
de Fomento (UF/CLF) for such day.

Definition of COP-Unidad de Valor Real (UVR)

COP- <u>Unidad de Valor Real (UVR)</u> :	<ul> <li>For any Reset Date, the difference between the value of the <i>unidad de valor real (UVR)</i> as certified by the Colombian <i>Banco de Republica</i> for the calendar day preceding such Reset Date and the value of <i>unidad de valor real (UVR)</i> as certified by the Colombian <i>Banco de Republica</i> for such Reset Date. The Calculation Agent shall convert such difference to the appropriate annualized percentage based on the terms of the Floating Amount payable by reference to the COP-<u><i>Unidad de Valor Real (UVR)</i></u>.</li> <li>If for any Reset Date there is no published the difference between the value of the <i>unidad de valor real (UVR)</i> as certified by the Colombian <i>Banco de Republica</i>, the Calculation Agent</li> </ul>
	shall determine the COP- <u>Unidad de Valor Real (UVR)</u> for such day.

#### Non-Deliverable Swap Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

#### Non-Deliverable Swap Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

#### Non-Deliverable Single-Currency Swap Notional Amounts

Currency	Minimum	Increment
INR	5,000,000	100,000
MYR	5,000,000	100,000
RHB	5,000,000	100,000

Currency	Minimum	Increment
ARS	As implied by the USD minimum	As implied by the USD increment
BRL	As implied by the USD minimum	As implied by the USD increment
CLP	As implied by the USD minimum	As implied by the USD increment
COP	As implied by the USD minimum	As implied by the USD increment
PEN	As implied by the USD minimum	As implied by the USD increment
USD	1,000,000	100,000

### Non-Deliverable Cross-Currency Swap Notional Amounts

# Non-Deliverable Foreign Exchange Options

Summary:	This covers "Non-Deliverable Foreign Exchange Options".
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards:
	(a) the 1998 FX and Currency Option Definitions, as amended and supplemented from time to time, including the 2005 Barrier Option Supplement to the 1998 FX and Currency Option Definitions (the "1998 Definitions");
	(b) the current EMTA Template Terms for Non- Deliverable Currency Option Transactions applicable to the Reference Currency and Settlement Currency (to the extent available for a particular Currency Pair) (available at: https://www.emta.org/ndftt.aspx); and
	(c) ISDA OTC Taxonomies.
Contract Types:	Each Non-Deliverable Foreign Exchange Option traded is bespoke and the terms agreed between the Buyer and Seller. All option strategies result in call options and/or put options executed with the following strategies traded as agreed between the parties:
	Vanilla: Outright Call / Put, Straddle, Strangle, Butterfly, Risk Reversal, Calendar (tenor) spread, Cross Currency Spread, Condor, Call Spread, Put Spread, Live Trading with no delta hedge.
	Exotic: Barriers, Baskets, Digitals (or Binary), Knockins, Knockouts, Reverse Knockins/Kockouts, No Touch, Double No Touch, Average Price, Worst of Options, Compound Options; trades may be with or without delta hedges and some structures may also be bilaterally negotiated with additional options as part of the package to form a vega hedge.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Foreign Exchange
ISDA OTC Base Product:	Vanilla Option, NDO, Simple Exotic or Complex Exotic
Terms:	
Trade Date:	The date the transaction is agreed between and becomes legally binding on the parties.
Commencement Date:	The Trade Date, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.
Buyer:	As specified by the parties.
Seller:	As specified by the parties.
Currency Option Style:	As specified by the parties.

	(An American option can be exercised any time up to and including the Expiration Date; a European option can only be exercised on the Expiration Date.)
Currency Option Type:	A Call with respect to the Call Currency and a Put with respect to the Put Currency; Binary in the case of a binary or digital option.
Call Currency:	The currency as specified by the parties from among those included in the list of available Currency Pairs.
	The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.
Call Currency Amount:	As specified by the parties or, if not so specified, derived from the Put Currency Amount and Strike Price.
Put Currency:	The currency as specified by the parties from among those included in the list of available Currency Pairs.
	The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.
Put Currency Amount:	As specified by the parties or, if not so specified, derived from the Call Currency Amount and Strike Price.
Strike Price:	As specified by the parties (if only one of the Put Currency or Call Currency is specified).
	If no Strike Price is specified and Automatic Exercise is applicable, the Strike Price will be calculated using the Put Currency and Call Currency in order to determine if the option is to be automatically exercised.
Reference Currency:	As specified by the parties.
Settlement Currency:	As specified by the parties.
Settlement Rate:	As specified by the parties or otherwise per the 1998 Definitions.
Settlement Rate Option:	As specified by the parties.
Expiration Date:	As specified by the parties.
Expiration Time:	The time in the location specified by the parities.
Latest Exercise Time:	The Expiration Time, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.
Automatic Exercise:	Applicable, unless otherwise specified by the parties.
Settlement:	Non-Deliverable
Settlement Amount:	In the case of a digital or binary option, as specified by the parties.
Settlement Date:	As specified by the parties.
Valuation Date:	As specified by the parties.
Averaging Dates:	As specified by the parties.

Premium:	As specified by the parties.
Premium Payment Date:	As specified by the parties.
Barrier Event:	As specified by the parties.
Calculation Agent:	As specified by the parties.
Business Day:	As specified by the parties.
Business Day Convention:	As specified by the parties.
Disruption Events:	As specified by the parties.
Disruption Fallbacks:	As specified by the parties for each applicable Disruption Event or otherwise per the 1998 Definitions.

Non-Deliverable Foreign Exchange Option Available Currency Pairs

AUD/CNY	CNY/THB	IDR/PHP	MYR/CNH	THB/INR
AUD/IDR	CNY/TWD	IDR/THB	MYR/CNY	THB/KRW
AUD/INR	EUR/ARS	IDR/TWD	MYR/EUR	THB/MYR
AUD/KRW	EUR/BRL	INR/AUD	MYR/GBP	THB/PHP
AUD/MYR	EUR/CLP	INR/CAD	MYR/IDR	THB/TWD
AUD/PHP	EUR/CNY	INR/CHF	MYR/INR	TWD/AUD
AUD/TWD	EUR/COP	INR/CNH	MYR/JPY	TWD/CAD
BRL/JPY	EUR/IDR	INR/CNY	MYR/KRW	TWD/CHF
BRL/MXN	EUR/INR	INR/EUR	MYR/NZD	TWD/CNH
CAD/BRL	EUR/KRW	INR/GBP	MYR/PHP	TWD/CNY
CAD/CNY	EUR/KZT	INR/HKD	MYR/SGD	TWD/EUR
CAD/IDR	EUR/MYR	INR/IDR	MYR/TWD	TWD/GBP
CAD/INR	EUR/PEN	INR/JPY	NZD/CNY	TWD/HKD
CAD/KRW	EUR/PHP	INR/KRW	NZD/IDR	TWD/IDR
CAD/MYR	EUR/TWD	INR/NZD	NZD/INR	TWD/INR
CAD/PHP	EUR/UAH	INR/PHP	NZD/KRW	TWD/JPY
CAD/TWD	GBP/BRL	INR/SGD	NZD/MYR	TWD/KRW
CHF/BRL	GBP/CNY	INR/TWD	NZD/PHP	TWD/MYR
CHF/CNY	GBP/IDR	JPY/CNY	NZD/TWD	TWD/NZD
CHF/IDR	GBP/INR	JPY/IDR	PHP/AUD	TWD/PHP
CHF/INR	GBP/KRW	JPY/INR	PHP/CAD	TWD/SGD
CHF/KRW	GBP/MYR	JPY/KRW	PHP/CHF	TWD/THB
CHF/MYR	GBP/PHP	JPY/MYR	PHP/CNH	USD/ARS
CHF/PHP	GBP/TWD	JPY/PHP	PHP/CNY	USD/BRL
CHF/TWD	HKD/CNY	JPY/TWD	PHP/EUR	USD/CLP

CNH/IDR	HKD/IDR	KRW/AUD	PHP/GBP	USD/CNY
CNH/INR	HKD/INR	KRW/CAD	PHP/HKD	USD/COP
CNH/KRW	HKD/KRW	KRW/CHF	PHP/IDR	USD/EGP
CNH/MYR	HKD/MYR	KRW/CNH	PHP/INR	USD/GHS
CNH/PHP	HKD/PHP	KRW/CNY	PHP/JPY	USD/IDR
CNH/TWD	HKD/TWD	KRW/EUR	PHP/KRW	USD/INR
CNY/AUD	IDR/AUD	KRW/GBP	PHP/MYR	USD/KES
CNY/CAD	IDR/CAD	KRW/IDR	PHP/NZD	USD/KRW
CNY/CHF	IDR/CHF	KRW/INR	PHP/THB	USD/KZT
CNY/EUR	IDR/CNH	KRW/JPY	PHP/TWD	USD/MYR
CNY/GBP	IDR/CNY	KRW/MYR	SGD/CNY	USD/NGN
CNY/HKD	IDR/EUR	KRW/NZD	SGD/IDR	USD/PEN
CNY/IDR	IDR/GBP	KRW/PHP	SGD/INR	USD/PHP
CNY/INR	IDR/HKD	KRW/SGD	SGD/KRW	USD/RUB
CNY/JPY	IDR/INR	KRW/THB	SGD/MYR	USD/TWD
CNY/KRW	IDR/JPY	KRW/TWD	SGD/PHP	USD/UAH
CNY/MYR	IDR/KRW	MYR/AUD	SGD/TWD	USD/VND
CNY/NZD	IDR/MYR	MYR/CAD	THB/CNY	USD/ZMW
CNY/PHP	IDR/NZD	MYR/CHF	THB/IDR	
L	I			

# Non-Deliverable Forward Foreign Exchange Contracts

Summary:	A non-deliverable forward ("NDF") is an outright forward in which the counterparties settle the difference between the contracted NDF price or rate and the prevailing spot price or rate on an agreed notional amount in an agreed settlement currency.
Reference Currency	AOA Angolan Kwanza
( <i>i.e.</i> , Non-Delivery Currency):	ARS Argentine Peso
	• BDT Bangladeshi Taka
	BRL Brazilian Real
	CLP Chilean Peso
	COP Colombian Peso
	CNY Chinese Renminbi
	DZD Algerian Dinar
	• EGP Egyptian pound
	GHS Ghanaian Cedi
	• GTQ Guatemalan quetzal
	• IDR Indonesian Rupiah
	INR Indian Rupee
	KES Kenyan Shilling
	KRW South Korean Won
	• KZT Kazakh tenge
	LKR Sri Lankan Rupee
	MAD Moroccan Dirham
	MUR Mauritian Rupee
	MYR Malaysian Ringgit
	MZN Mozambican Metical
	NGN Nigerian Naira
	PEN Peruvian nuevo sol
	PHP Philippine Peso
	PKR Pakistani Rupee
	RUB Russian ruble
	TND Tunisian Dinar
	TWD Taiwan Dollar
	TZS Tanzanian Shilling

	UAH Ukrainian Hryvnia	
	• UGX Ugandan Shilling	
	UYU Uruguayan peso	
	VEB Venezuelan bolívar	
	VND Vietnamese đồng	
	XAF Central African CFA Franc	
	XOF West African CFA Franc	
	ZMW Zambian Kwacha	
Settlement Currency:	AUD Australian Dollar	
	CAD Canadian Dollar	
	EUR Euro	
	GBP British Pound	
	• JPY Japanese Yen	
	• USD US Dollar	
	CHF Swiss Franc	
Quoting Convention and Minimum Increment:	Notional amount, as agreed by counterparties.	
Minimum Size:	Notional amount, as agreed by counterparties.	
Notional Currency:	Currency in which contract size is expressed, as agreed by counterparties.	
Trading Conventions:	Buy or Sell which refers to the contract size expressed in notional currency.	
Forward Rates:	Currency exchange rate expressed as the amount of reference currency per unit of settlement currency.	
Trade Date:	The date on which parties enter into the contract.	
Settlement Date:	Specified settlement or payment date, as agreed by counterparties.	
Fixing Date:	The date at which the difference between the prevailing market exchange rate and the agreed upon exchange rate is calculated.	
Settlement Procedure:	Bilateral settlement performed in settlement currency.	
Disruption Events:	Unless otherwise specified by the parties, as set forth in the EMTA Template Terms for Non-Deliverable FX Forward Transactions applicable to the Reference Currency and Settlement Currency:	
	http://www.emta.org/ndftt.aspx	

# **PO Index Contracts**

Summary:	This covers Markit PO Fixed for Floating Swap
Linute diama and Annihila Calastiana and Dafaalt	Transactions (the "Contracts").
Limitations on Available Selections and Default	The terms under which the Contracts may be traded are
Settings:	as specified in these terms and conditions. For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	In many cases there are normal "vanilla" terms on which
	the parties will transact.
	These are shown as "Default" and will apply unless the
	parties vary them.
Incorporated Standards:	This contract description incorporates by reference the
-	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions;
	(b) ISDA OTC Taxonomies; and
	(c) the Markit PO Standard Terms Supplement (June
	12, 2010 version) or any subsequent Standard
	Terms Supplement (the "Standard Terms").
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Credit
ISDA OTC Base Product:	Index
ISDA OTC Sub-Product:	PO
ISDA OTC Transaction Type:	PO
Further Limitations:	None
Terms: Effective Date:	As specified by the parties, subject to adjustment in
Encenve Date.	accordance with the Standard Terms.
Scheduled Termination Date:	As agreed by the parties.
Termination Date:	Per the Standard Terms.
Notional Amount:	An amount is USD agreed by the parties.
Index:	One of the Markit PO Index series, as specified by the
	parties from all then-available series (to the extent such
	series is not then a narrow-based index within the
	meaning of the CFTC's regulations).
Annex Date:	As agreed by the parties.
Index Provider:	Per the Standard Terms.
Fixed Rate Payer:	As agreed by the parties.
Floating Rate Payer:	As agreed by the parties.
Period End Dates:	Per the Standard Terms.
Reset Dates:	Per the Standard Terms
Payment Dates:	Per the Standard Terms.
Calculation Agent:	As agreed by the parties or, if not so agreed, per the
	Standard Terms.
Day Count Fraction:	Per the Standard Terms.
Business Days:	For any purpose, per the Standard Terms.
Business Day Convention:	Per the Standard Terms.
Initial Payment:	

Initial Payment:	Per the Standard Terms.
Initial Payment Amount:	An amount in USD as specified by the parties.
Initial Payment Payer:	As specified by the parties.
Initial Payment Date:	Per the Standard Terms.
Settlement Payments	
Mark to Market Amount Payment:	Per the Standard Terms.
Mark to Market Amount Payer:	Per the Standard Terms.
Mark to Market Amount:	Per the Standard Terms.
Financing Payment:	Per the Standard Terms.
Financing Payment Amount:	Per the Standard Terms.
Principal Payment:	Per the Standard Terms.
Principal Payment Amount:	Per the Standard Terms.
Net Payment:	Per the Standard Terms.
Net Payment Amount Payer:	Per the Standard Terms.
Net Payment Amount:	Per the Standard Terms.
Agency Coupon:	Per the Standard Terms.
Index LIBOR:	Per the Standard Terms.
Index Factor:	Per the Standard Terms.
Commencing Index Factor:	Per the Standard Terms.
Period End Index Factor:	Per the Standard Terms.
Index Price:	Per the Standard Terms.
Commencing Index Price:	Per the Standard Terms.
Period End Index Price:	Per the Standard Terms.
Event Affecting the Index:	
Events and Adjustments:	All are per the Standard Terms.

### Single Currency Fixed for Floating Interest Rate Swaps - CME Cleared

Summary:	This covers single currency fixed for floating interest rate swaps cleared by the Chicago Mercantile Exchange Inc. ("CME").
Limitations on Available Selections and Default Settings:	<ul> <li>The terms under which a Single Currency Fixed for</li> <li>Floating Interest Rate Swap/CME Cleared may be traded</li> <li>are as specified in these terms and conditions, which</li> <li>incorporate the CME Rulebook, in particular Chapters</li> <li>900 and 901 (and any successor provisions) and the</li> <li>CME Cleared IRS Product Scope (or any successor).</li> <li>By electing to trade a Single Currency Fixed for</li> <li>Floating Interest Rate Swap/CME Cleared,</li> <li>participants are representing that they are familiar</li> <li>with the CME Rulebook and the limitations on</li> <li>transaction terms contained in it.</li> </ul>
Incorporated Standards:	<ul> <li>This contract description incorporates by reference the CME Rulebook as in effect from time to time.</li> <li>The CME Rulebook itself may incorporate certain additional standards, such as the 2000 ISDA Definitions and 2006 ISDA Definitions.</li> <li>Be aware that the timing of effectiveness of amendments or supplements to the ISDA standards may vary between bilateral and CME contracts, since the CME may reserve the right to select when and how such changes become effective.</li> </ul>
Product Type/ISDA OTC Taxonomy:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product(s):	Fixed Float and OIS
Further Limitations:	Must comply with CME Clearing Requirements.
Terms:	
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2000/ISDA2006) elected by, or otherwise binding on, the parties in accordance with the CME Rulebook.
Effective Date:	As per the CME Rulebook.
Notional Amount:	An amount in Currency determined by the parties subject to limitations in the CME Rulebook. This may vary from period to period to the extent permitted by the CME Rulebook. The CME Rulebook may limit the Currencies and Floating Rate Options for which variable notionals are permitted.
Currency:	One of the currencies permitted for the relevant transaction type per the CME Rulebook.
Business Days:	As per the CME Rulebook, which may require certain Business Days be applicable on a per Currency or Floating Rate Option Basis and may otherwise limit the available Business Day locations which can be elected.
Business Day Convention:	As per the CME Rulebook.
Trade Date:	As per the CME Rulebook.
Termination Date:	As agreed by the parties, subject to any minimum or

	maximum tenor in the CME Rulebook.
Termination Date Business Day Convention:	As per the CME Rulebook, and thus subject to
	limitations based on other terms of the transaction.
Stub Periods:	Permitted to the extent allowed under the CME
	Rulebook.
Fixed Rate Payer Payment Dates:	As per the CME Rulebook.
Fixed Amount:	As per the CME Rulebook, which may permit use of a
	schedule.
Fixed Rate:	As agreed by the parties, subject to any minimum or
	maximum rate and per-period variability permitted in the
	CME Rulebook.
Floating Rate Payer Payment Dates:	As per the CME Rulebook.
Floating Amount:	As per the CME Rulebook.
Floating Rate Option:	As determined by the parties, subject to the CME
	Rulebook, which may provide a more limited list of
	available options for a Currency than does the Definition
	Set.
Designated Maturity:	As per the CME Rulebook, which may provide a more
	limited set of Designated Maturities than does the
	related rate source page.
Spread:	Subject to any minimum or maximum rate and per-
	period variability permitted by the CME Rulebook.
Reset Dates:	As the per CME Rulebook.
Floating Rate Daycount Fraction:	As per the CME Rulebook.
Floating Rate for Initial Calculation Period:	As per the CME Rulebook.
Fixed Rate Payer:	As determined by the parties.
Floating Rate Payer:	As determined by the parties.
Compounding:	As per the CME Rulebook.
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitations in
-	the CME Rulebook.
Additional Payment/Fees:	As determined by the parties, subject to limitations in
	the CME Rulebook.
Payment Date for Additional Payment/Fees	As determined by the parties, subject to limitations in
	the CME Rulebook.

## Single Currency Fixed for Floating Interest Rate Swaps – LCH Cleared

Summary:	This covers single currency fixed for floating swaps cleared by LCH.Clearnet ("LCH").
Limitations on Available Selections and Default Settings:	The terms under which a Single Currency Fixed for Floating Interest Rate Swaps/LCH Cleared contract may be traded are as specified in these terms and conditions, which incorporate the LCH Rulebook, in particular Schedule 4A (or any successor provisions).
	By electing to trade a Single Currency Fixed for Floating Interest Rate Swap/LCH Cleared, participants are representing that they are familiar with the LCH Rulebook and the limitations on transaction terms contained in it.
Incorporated Standards:	This contract description incorporates by reference the LCH Rulebook as in effect from time to time. The LCH Rulebook itself may incorporate certain additional standards, such as the 2000 ISDA Definitions and 2006 ISDA Definitions.
	Be aware that the timing of effectiveness of amendments or supplements to the ISDA standards may vary between bilateral and LCH contracts, since the LCH may reserve the right to select when and how such changes become effective.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product(s):	Fixed Float and OIS
Further Limitations:	Must comply with LCH Clearing Requirements
Terms:	
Definition Set:	The definition set (e.g., ISDA 2000/ISDA 2006) elected by, or otherwise binding on, the parties in accordance with the LCH Rulebook.
Notional Amount:	An amount in Currency determined by the parties subject to limitations in the LCH Rulebook. This may vary from period to period to the extent permitted by the LCH Rulebook. The LCH Rulebook may limit the Currencies and Floating Rate Options for which variable notionals are permitted.
Currency:	One of the currencies permitted for the relevant transaction type per the LCH Rulebook.
Trade Date:	As per the LCH Rulebook.
Effective Date:	As per the LCH Rulebook.
Termination Date:	As agreed by the parties, subject to any minimum or maximum tenor in the LCH Rulebook.
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook.
Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook
Payment Date for Additional Payment/Fees	As determined by the parties, subject to limitations in the LCH Rulebook, which may limit the earliest or latest day on which such fees may be paid based on Currency or other factors.

Business Days:	As per the LCH Rulebook, which may require certain
	Business Days be applicable on a per Currency or Floating
	Rate Option Basis and may otherwise limit the available
	Business Day locations which can be elected.
Business Day Convention:	As per the LCH Rulebook.
Stub Periods:	Permitted to the extent allowed under the LCH Rulebook.
Fixed Rate Payer:	As determined by the parties.
Fixed Rate Payer Payment Dates:	As per the LCH Rulebook.
Fixed Amount:	As per the LCH Rulebook, which may permit use of a schedule.
Fixed Rate:	As agreed by the parties, subject to any minimum or
Theu Nute.	maximum rate and per-period variability permitted in the
	LCH Rulebook.
Floating Rate Payer	As determined by the parties.
Floating Rate Payer Payment Dates:	As per the LCH Rulebook.
Floating Rate Payer Compounding Dates:	As per the LCH Rulebook.
Floating Amount:	As per the LCH Rulebook.
Floating Rate Option:	As determined by the parties, subject to the LCH
	Rulebook, which may provide a more limited list of
	available options for a Currency than does the Definition
	Set.
Designated Maturity:	As per the LCH Rulebook, which may provide a more
	limited set of Designated Maturities than does the related
	rate source page.
Spread:	Subject to any minimum or maximum rate and per-period
	variability permitted by the LCH Rulebook.
Reset Dates:	As the per LCH Rulebook.
Floating Rate Daycount Fraction:	As per the LCH Rulebook.
Negative Interest Rates:	As per the LCH Rulebook, which may require use of a
	single method.
Withholding and Tax:	As per the LCH Rulebook.
Governing Law:	As per the LCH Rulebook, which may dictate the law
	applicable to the Transaction.

## U.S. Electricity – Fixed/Floating Swap Contracts

Terms a	nd Conditions	
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Summary:	This covers fixed-for-floating U.S. electricity swaps ("U.S. Electricity – Fixed/Floating Swap Contracts").		
Limitations on Available Selections and Default Settings:	<ul> <li>The terms under which U.S. Electricity – Fixed/Floating Swap Contracts may be traded are shown below or in the attached tables.</li> <li>For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</li> <li>In many cases there are normal "vanilla" terms on which the parties will transact.</li> <li>These are shown as "Default" and will apply unless the parties vary them.</li> </ul>		
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards: 2005 ISDA Commodity Derivatives Definitions ("Commodity Definitions")		
Product Type/ISDA OTC Taxonomy:			
ISDA OTC Asset Class:	Commodity		
ISDA OTC Base Product:	Energy		
ISDA OTC Sub-Product:	Elec		
ISDA OTC Transaction type:	Swap		
Further Limitations:	None		
Terms:			
Trade Date:	As agreed by the parties.		
Effective Date:	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention.		
Effective Date Business Days:	USNY		
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.		
Termination Date:	As specified by the parties.		
Termination Date Business Days:	USNY		
Termination Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.		
Commodity	As specified by the parties from among the Available Commodities.		
Notional Quantity:	The sum of the Notional Quantities per Calculation Period.		
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period Basis.		
Settlement Periods:	If specified by the parties or if applicable to the relevant Commodity Reference Price and specified herein. Parties may specify one of the Available Set Tenors as a Settlement Period or may specify another period.		

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Applicable Days:	If applicable to the relevant Commodity Reference Price
	and specified therein or if applicable to the relevant
	Available Set Tenor and specified therein (i.e., Month).
	Applicable Days does not apply to Commodity
	Reference Prices under the headings "ISDA Definition"
	or "Exchange Definition".
Duration:	Hourly
Start Time(s)/End Time(s):	If specified by the parties or if applicable to the relevant Commodity Reference Price and specified herein.
Payment Dates:	In relation to each Calculation Period, as specified by the
	parties, each such day being subject to adjustment in
	accordance with the Payment Date Business Day
	Convention.
Payment Date Business Days:	USNY
Payment Date Business Day Convention:	As specified by the parties.
Fixed Amount:	
Fixed Price Payer:	As specified by the parties.
Fixed Price or Fixed Amount:	As specified by the parties per Unit of the Commodity.
Floating Amount:	
Floating Price Payer:	As specified by the parties.
Applicable Spread:	As specified by the parties.
Commodity Reference Price:	As specified by the parties from among the Available
	Commodity Reference Prices.
Market Disruption:	
Market Disruption Events:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Additional Market Disruption Events:	As specified by the parties.
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Disruption Fallbacks:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Fallback Reference Price:	None, unless specified by the parties.
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the
* *	Commodity Definitions.
Calculation Agent:	As agreed by the parties.

U.S. Electricity - Fixed/Floating Swap Contracts Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY

## U.S. Electricity - Fixed/Floating Swap Contracts Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

Set Tenor	Settler	Settlement Period		
Month	-	The specified calendar month; if OFF PEAK/PEAK is		
	not specified, PEAK is as	sumed		
Season	Season	Days in Specified Year		
	Winter	1 January through the last		
		day of February in the		
		specified year		
	Spring	1 March through 30 April		
		in the specified year		
	Summer	1 July through 31 August		
		in the specified year		
Quarter	Quarter Number	Days in Specified Year		
	Q1	1 January through 31		
		March		
	Q2	1 April through 30 June		
	Q3	1 July through 30		
		September		
	Q4	1 October through 31		
		December		
Calendar Year	1 January through 31 Dec	1 January through 31 December in the specified year		
Planning Year	· · · · · ·	1 June in the specified beginning calendar year through		
		31 May in the specified ending calendar year		

#### U.S. Electricity – Fixed/Floating Swap Contracts Available Set Tenors

U.S. Electricity - Fixed/Floating Swap Contracts Available Commodity Reference Prices

#### **ISDA Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

# Note that these Commodity Reference Prices relate to all hours in the Pricing Date (i.e., are "Around the Clock"); for the equivalent Peak and Off-Peak prices, see below.

ISDA Definition
ELECTRICITY-NYISO-ZONE A (WEST)-DAY AHEAD
ELECTRICITY-NYISO-ZONE G (HUD VL)-DAY AHEAD
ELECTRICITY-NYISO-ZONE J (N.Y.C.)-DAY AHEAD
ELECTRICITY-ISO NEW ENGLAND-MASS HUB-DAY AHEAD
ELECTRICITY-ISO NEW ENGLAND-NE MASS BOSTON-DAY AHEAD
ELECTRICITY-PJM-EASTERN HUB-DAY AHEAD
ELECTRICITY-PJM-PSEG-DAY AHEAD
ELECTRICITY-PJM-WESTERN HUB-DAY AHEAD

#### **Exchange Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions. Note that these Commodity Reference Prices relate to all hours in the Pricing Date (i.e., are "Around the Clock"); for the equivalent Peak and Off-Peak prices, see below.

	ISDA Definition				
Commodity Reference Price	Relevant Commodity	Relevant Unit	Exchange	Currency	Specified Price

ELECTRICITY	Electricity	MwH	ICE	USD 0.01	"ELECTRICIT
-NP15 DAY					Y-CAISO-
AHEAD PEAK-					NP15-DAY
ICE					AHEAD"
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	"ELECTRICIT
-NP15 DAY					Y-CAISO-
AHEAD PEAK-					NP15-DAY
ICE					AHEAD"
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	"ELECTRICIT
-SP15 DAY					Y-CAISO-
AHEAD OFF					SP15-DAY
PEAK-ICE					AHEAD"
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	"ELECTRICIT
-SP15 DAY					Y-CAISO-
AHEAD PEAK-					SP15-DAY
ICE					AHEAD"
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	ELECTRICITY
-PALO VERDE	-				-PALO VERDE
OFF PEAK-ICE					OFF-PEAK-ICE
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	ELECTRICITY
-PALO VERDE	-				-PALO VERDE
PEAK-ICE					PEAK-ICE
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	ELECTRICITY
-MID C OFF	-				-MID C OFF-
PEAK-ICE					PEAK-ICE
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	ELECTRICITY
-MID C PEAK-	-				-MID C PEAK-
ICE					ICE

#### Non-ISDA, Non-Exchange Definitions

For any of the Commodity Reference Prices below, the price for the Settlement Period specified for that Pricing Date will be that hour's Specified Price per MWh of electricity for delivery on an Applicable Day specified for that Commodity Reference Price, published by the specified Source on the specified Page under the specified Heading (or any successor Source, Page or Heading), that reports prices effective on such Applicable Day.

Commodity	Settlement	Source	Page	Heading
<b>Reference Price</b>	Period			_
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP			operations/energy/day-ahead/lmpda.aspx	HUB, TotalLMP
DAYTON HUB-				
ATC DAY				
AHEAD				
ELECTRICITY-	Eastern Off	PJM	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP	Peak		operations/energy/day-ahead/lmpda.aspx	HUB, TotalLMP
DAYTON HUB-				
OFF PEAK				
DAY AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP	Peak		operations/energy/day-ahead/lmpda.aspx	HUB, TotalLMP
DAYTON HUB-				
OFF PEAK				
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	AEP DAYTON

PJM-AEP			operations/energy/real-time/lmp.aspx	HUB, TotalLMP
DAYTON HUB-			operations/energy/real-unic/imp.aspx	IIOD, IOtaiLivii
ATC				
REALTIME				
ELECTRICITY-	Eastern Off	РЈМ	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP	Peak	1 9101	operations/energy/real-time/lmp.aspx	HUB, TotalLMP
DAYTON HUB-	1 oun		operations, energy, rear ante, implaspri	field, fotuillith
OFF PEAK				
REAL TIME				
ELECTRICITY-	Eastern	РЈМ	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP	Peak	1 9101	operations/energy/real-time/lmp.aspx	HUB, TotalLMP
DAYTON HUB-	1 0000			1102, 10002001
OFF PEAK				
REAL TIME				
ELECTRICITY-	N/A	РЈМ	http://www.pjm.com/markets-and-	COMED, TotalLMP
PJM-COMED			operations/energy/day-ahead/lmpda.aspx	
HUB-ATC DAY			- <u></u>	
AHEAD				
ELECTRICITY-	Eastern Off	РЈМ	http://www.pjm.com/markets-and-	COMED, TotalLMP
PJM-COMED	Peak		operations/energy/day-ahead/lmpda.aspx	
HUB-OFF			<u></u>	
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	COMED, TotalLMP
PJM-COMED	Peak		operations/energy/day-ahead/lmpda.aspx	,
HUB-OFF				
PEAK DAY				
AHEAD				
ELECTRICITY-	N/A	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-			rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)
INDIANA HUB-			(Report Type: Day-Ahead, Report:	
ATC DAY			Name: Day Ahead Pricing (pdf))	
AHEAD				
ELECTRICITY-	Eastern Off	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-	Peak		rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)
INDIANA HUB-			(Report Type: Day-Ahead, Report:	_
OFF PEAK			Name: Day Ahead Pricing (pdf))	
DAY AHEAD				
ELECTRICITY-	Eastern	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-	Peak		rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)
INDIANA HUB-			(Report Type: Day-Ahead, Report:	
PEAK DAY			Name: Day Ahead Pricing (pdf))	
AHEAD				
ELECTRICITY-	N/A	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-			rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)
INDIANA HUB-			(Report Type: Real -Time, Report: Real-	
ATC REAL			Time Pricing (pdf))	
TIME				
ELECTRICITY-	Eastern Off	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-	Peak		rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)
INDIANA HUB-			(Report Type: Real -Time, Report: Real-	
OFF PEAK			Time Pricing (pdf))	
REAL TIME				
ELECTRICITY-	Eastern	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-	Peak		rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)

				1
INDIANA HUB-			(Report Type: Real -Time, Report: Real-	
PEAK REAL			Time Pricing (pdf))	
TIME	37/4			
ELECTRICITY-	N/A	MISO	https://www.misoenergy.org/Library/Ma	Michigan Hub,
MISO-			rketReports/Pages/MarketReports.aspx	LMP Prices (\$ per
MICHIGAN			(Report Type: Day-Ahead, Report:	MW)
HUB-ATC DAY			Name: Day Ahead Pricing (pdf))	
AHEAD				
ELECTRICITY-	Central Off	MISO	https://www.misoenergy.org/Library/Ma	Michigan Hub,
MISO-	Peak		rketReports/Pages/MarketReports.aspx	LMP Prices (\$ per
MICHIGAN			(Report Type: Day-Ahead, Report:	MW)
HUB-OFF			Name: Day Ahead Pricing (pdf))	
PEAK DAY				
AHEAD				
ELECTRICITY-	Central	MISO	https://www.misoenergy.org/Library/Ma	Michigan Hub,
MISO-	Peak		rketReports/Pages/MarketReports.aspx	LMP Prices (\$ per
MICHIGAN			(Report Type: Day-Ahead, Report:	MW)
HUB-PEAK			Name: Day Ahead Pricing (pdf))	
DAY AHEAD			(unio 2 u) ( none ( nong ( pu))	
ELECTRICITY-	N/A	РЈМ	http://www.pjm.com/markets-and-	N ILLINOIS HUB,
MISO-	11/11	1 9 1 1	operations/energy/day-ahead/Impda.aspx	TotalLMP
NORTHERN			operations, energy day anoud, imput.dspx	1 Juillini
ILLINOIS HUB-				
ATC DAY				
AHEAD				
ELECTRICITY-	Central Off	PJM	http://www.pjm.com/markets-and-	N ILLINOIS HUB,
MISO-	Peak	FJIVI	operations/energy/day-ahead/lmpda.aspx	TotalLMP
NORTHERN	геак		operations/energy/day-anead/impda.aspx	TOTALLIVIE
ILLINOIS HUB-				
OFF PEAK				
DAY AHEAD				
ELECTRICITY-	Central	PJM	http://www.pjm.com/markets-and-	N ILLINOIS HUB,
	Peak	FJIVI		TotalLMP
MISO-	Peak		operations/energy/day-ahead/lmpda.aspx	TOTALLIVIE
NORTHERN				
ILLINOIS HUB-				
PEAK DAY				
AHEAD	<b>NT/A</b>	DD (		
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	N ILLINOIS HUB,
MISO-			operations/energy/real-time/lmp.aspx	TotalLMP
NORTHERN				
ILLINOIS HUB-				
ATC REAL				
TIME				
ELECTRICITY-	Central Off	PJM	http://www.pjm.com/markets-and-	N ILLINOIS HUB,
MISO-	Peak		operations/energy/real-time/lmp.aspx	TotalLMP
NORTHERN				
ILLINOIS HUB-				
OFF PEAK				
REAL TIME				
ELECTRICITY-	Central	PJM	http://www.pjm.com/markets-and-	N ILLINOIS HUB,
MISO-	Peak		operations/energy/real-time/lmp.aspx	TotalLMP
NORTHERN				
ILLINOIS HUB-				
PEAK REAL				
TIME				
<u> </u>	1	1		ı]

ELECTRICITY- ISO NEW ENGLAND- CONNECTICU T ZONE-ATC DAY AHEAD	N/A	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cate gory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.CONNECTICUT , Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- CONNECTICU T ZONE-OFF PEAK DAY AHEAD	Eastern Off Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cate gory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.CONNECTICUT , Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- CONNECTICU T ZONE-PEAK DAY AHEAD	Eastern Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cate gory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.CONNECTICUT , Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- ATC DAY AHEAD	N/A	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cate gory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- OFF PEAK DAY AHEAD	Eastern Off Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cate gory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- PEAK DAY AHEAD	Eastern Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cate gory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- ATC DAY AHEAD	N/A	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cate gory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- OFF PEAK DAY AHEAD	Eastern Off Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cate gory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- PEAK DAY AHEAD	Eastern Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cate gory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh

ELECTRICITY- ISO NEW	See ISDA Definition			
ENGLAND-				
MASS HUB-				
ATC DAY				
AHEAD				
ELECTRICITY-	Eastern Off	ISO NE	http://www.iso-	.H.INTERNAL_HU
ISO NEW	Peak		ne.com/markets/hst_rpts/hstRpts.do?cate	B, Locational
ENGLAND-			gory=Hourly	Marginal Pricing
MASS HUB-			Report Type: Hourly Data; Report Day-	\$/MWh
OFF PEAK			Ahead LMPs (March 2003 - Present)	+/ / /
DAY AHEAD				
ELECTRICITY-	Eastern	ISO NE	http://www.iso-	.H.INTERNAL_HU
ISO NEW	Peak	150 HE	ne.com/markets/hst_rpts/hstRpts.do?cate	B, Locational
ENGLAND-	I Cux		gory=Hourly	Marginal Pricing
MASS HUB-			Report Type: Hourly Data; Report Day-	\$/MWh
PEAK DAY			Ahead LMPs (March 2003 - Present)	φ/141 44 11
AHEAD			A mead Elvir 5 (Waren 2005 Tresent)	
ELECTRICITY-	N/A	ISO NE	http://www.iso-	.Z.SEMASS,
ISO NEW	11/11	ISO NL	ne.com/markets/hst_rpts/hstRpts.do?cate	Locational Marginal
ENGLAND-			gory=Hourly	Pricing \$/MWh
SEMASS			Report Type: Hourly Data; Report Day-	
ZONE-DAY			Ahead LMPs (March 2003 - Present)	
AHEAD			Alleau Livir's (March 2003 - Fresent)	
ELECTRICITY-	Eastern Off	ISO NE	http://www.iso-	.Z.SEMASS,
ISO NEW	Peak	150 NE	ne.com/markets/hst_rpts/hstRpts.do?cate	Locational Marginal
ENGLAND-	Гсак		gory=Hourly	Pricing \$/MWh
SEMASS			Report Type: Hourly Data; Report Day-	Friend \$7 wi wit
ZONE-OFF			Ahead LMPs (March 2003 - Present)	
PEAK DAY			Allead LMPS (March 2005 - Present)	
AHEAD				
ELECTRICITY-	Eastern	ISO NE	http://www.iso-	.Z.SEMASS,
ISO NEW	Peak	150 NE	ne.com/markets/hst_rpts/hstRpts.do?cate	Locational Marginal
ENGLAND-	Гсак		gory=Hourly	Pricing \$/MWh
SEMASS			Report Type: Hourly Data; Report Day-	
ZONE-PEAK			Ahead LMPs (March 2003 - Present)	
DAY AHEAD			Anead Livit's (Water 2003 - Tresent)	
ELECTRICITY-	See ISDA De	finition		
ISO NEW	See ISDA De			
ENGLAND-				
NEMASSBOST				
ZONE-DAY				
AHEAD				
ELECTRICITY-	Eastern Off	ISO NE	http://www.iso-	.Z.NEMASSBOST,
ISO NEW	Peak	ISO NL	ne.com/markets/hst_rpts/hstRpts.do?cate	Locational Marginal
ENGLAND-	I Cun		gory=Hourly	Pricing \$/MWh
NEMASSBOST			Report Type: Hourly Data; Report Day-	τιντης ψ/141 (411
ZONE-OFF			Ahead LMPs (March 2003 - Present)	
PEAK DAY			- mout Litit 5 (mutch 2005 - 11050ht)	
AHEAD				
ELECTRICITY-	Eastern	ISO NE	http://www.iso-	.Z.NEMASSBOST,
ISO NEW	Peak		ne.com/markets/hst_rpts/hstRpts.do?cate	Locational Marginal
ENGLAND-	1 Cur		gory=Hourly	Pricing \$/MWh
NEMASSBOST			Report Type: Hourly Data; Report Day-	
ZONE-PEAK			Ahead LMPs (March 2003 - Present)	
	1	1	rando Entres (truiten 2005 Tresent)	1]

DAY AHEAD				
ELECTRICITY-	N/A	ISO NE	http://www.iso-	.Z.WCMASS,
ISO NEW			ne.com/markets/hst_rpts/hstRpts.do?cate	Locational Marginal
ENGLAND-			gory=Hourly	Pricing \$/MWh
WCMASS			Report Type: Hourly Data; Report Day-	
ZONE-DAY			Ahead LMPs (March 2003 - Present)	
AHEAD				
ELECTRICITY-	Eastern Off	ISO NE	http://www.iso-	.Z.WCMASS,
ISO NEW	Peak	150 ML	ne.com/markets/hst_rpts/hstRpts.do?cate	Locational Marginal
ENGLAND-	I Cak		gory=Hourly	Pricing \$/MWh
WCMASS			Report Type: Hourly Data; Report Day-	
ZONE-OFF			Ahead LMPs (March 2003 - Present)	
PEAK DAY			Allead Livit's (March 2005 - Flesent)	
AHEAD	East			
ELECTRICITY-	Eastern	ISO NE	http://www.iso-	.Z.WCMASS,
ISO NEW	Peak		ne.com/markets/hst_rpts/hstRpts.do?cate	Locational Marginal
ENGLAND-			<u>gory=Hourly</u>	Pricing \$/MWh
WCMASS			Report Type: Hourly Data; Report Day-	
ZONE-PEAK			Ahead LMPs (March 2003 - Present)	
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	AECO ZONE,
PJM-			operations/energy/day-ahead/lmpda.aspx	TotalLMP
ATLANTIC				
ZONE-ATC				
DAY AHEAD				
ELECTRICITY-	Eastern Off	РЈМ	http://www.pjm.com/markets-and-	AECO ZONE,
PJM-	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
ATLANTIC				
ZONE-OFF				
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	РЈМ	http://www.pjm.com/markets-and-	AECO ZONE,
PJM-	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
ATLANTIC				
ZONE-PEAK				
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	BGE ZONE,
PJM-	11/11	1 3 1 7 1	operations/energy/day-ahead/Impda.aspx	TotalLMP
BALTIMORE			operations, energy day anead/impda.aspx	I OWILAVII
GAS AND				
ELECTRIC				
ZONE-ATC				
DAY AHEAD				
	Eastern Off	DIM	http://www.pipe.com/wordlatts.com/	DCE ZONE
ELECTRICITY-	Eastern Off	PJM	http://www.pjm.com/markets-and-	BGE ZONE,
PJM-	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
BALTIMORE				
GAS AND				
ELECTRIC				
ZONE-OFF				
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	BGE ZONE,
PJM-	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
BALTIMORE				
GAS AND				
-				

FLECTIO				
ELECTRIC				
ZONE-PEAK				
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	DPL ZONE,
PJM-DPL			operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-ATC				
DAY AHEAD				
ELECTRICITY-	Eastern Off	PJM	http://www.pjm.com/markets-and-	DPL ZONE,
PJM-DPL	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-OFF				1 0000000000
PEAK DAY				
AHEAD				
	Eastan			DDL ZONE
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	DPL ZONE,
PJM-DPL	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-PEAK				
DAY AHEAD				
ELECTRICITY-	See ISDA De	efinition		
PJM-EASTERN				
HUB-ATC DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	EASTERN HUB,
PJM-EASTERN	Off-Peak	1 5101	operations/energy/day-ahead/lmpda.aspx	TotalLMP
HUB-OFF	OII-I Cak		operations/energy/day-anead/impda.aspx	TOTALLIVII
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	EASTERN HUB,
PJM-EASTERN	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
HUB- PEAK				
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	JCPL ZONE,
PJM-JCPL			operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-ATC				
DAY AHEAD				
ELECTRICITY-	Eastern Off	PJM	http://www.pjm.com/markets-and-	JCPL ZONE,
PJM-JCPL	Peak	1 3101	operations/energy/day-ahead/Impda.aspx	TotalLMP
	геак		operations/energy/day-anead/impda.aspx	TOTALLIVIE
ZONE-OFF				
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	JCPL ZONE,
PJM-JCPL	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-PEAK				
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	METED ZONE,
PJM-METED			operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-ATC				
DAY AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	METED ZONE,
		T JIVI		
PJM-METED	Off-Peak		operations/energy/day-ahead/Impda.aspx	TotalLMP
ZONE-OFF				
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	METED ZONE,
PJM-METED	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-PEAK				
DAY AHEAD				
	1	1		

ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	DECO ZONE
PJM-PECO	IN/A	PJIVI	operations/energy/day-ahead/lmpda.aspx	PECO ZONE, TotalLMP
ZONE-ATC			operations/energy/day-anead/impda.aspx	TOTALLIVIE
DAY AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PECO ZONE,
PJM-PECO	Off-Peak	I JIVI	operations/energy/day-ahead/Impda.aspx	TotalLMP
ZONE-OFF	OII-I Cak		operations/energy/day-anead/impda.aspx	TOTALLIVII
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PECO ZONE,
PJM-PECO	Peak	1 5101	operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-PEAK	I Cak		operations/energy/day-anead/impda.aspx	TOTALLIVII
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	PEPCO ZONE,
PJM-PEPCO	14/11	1 5101	operations/energy/day-ahead/Impda.aspx	TotalLMP
ZONE-ATC			operations/energy/day anead/impda.aspx	TotulLivii
DAY AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PEPCO ZONE,
PJM-PEPCO	Off-Peak	1 9141	operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-OFF	On reak		operations/energy/day anead/impda.aspx	TotulLivii
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	РЈМ	http://www.pjm.com/markets-and-	PEPCO ZONE,
PJM-PEPCO	Peak	1 5101	operations/energy/day-ahead/Impda.aspx	TotalLMP
ZONE-PEAK	1 Cux		operations, energy, day anead, impailably.	TotulLivii
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL	1.0/1.	1 5101	operations/energy/day-ahead/Impda.aspx	TotalLMP
ZONE-ATC			<u>operations, energy, aug-aneaa, impaa.uspr</u>	TotulLivit
DAY AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL	Off-Peak	10111	operations/energy/day-ahead/Impda.aspx	TotalLMP
ZONE-OFF				
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	РЈМ	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL	Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-PEAK				
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL			operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-ATC				
DAY AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL	Off-Peak		operations/energy/day-ahead/lmpda.aspx	TotalLMP
ZONE-OFF				
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL	Peak		operations/energy/day-ahead/Impda.aspx	TotalLMP
ZONE-PEAK				
DAY AHEAD				
ELECTRICITY-	See ISDA D	Definition		
PJM-PSEG				
ZONE-ATC				

DAY AHEAD				
ELECTRICITY- PJM-PSEG ZONE-OFF	Eastern Off-Peak	PJM	http://www.pjm.com/markets-and- operations/energy/day-ahead/lmpda.aspx	PSEG ZONE, TotalLMP
PEAK DAY AHEAD	-			
ELECTRICITY- PJM-PSEG ZONE-PEAK	Eastern Peak	РЈМ	http://www.pjm.com/markets-and- operations/energy/day-ahead/Impda.aspx	PSEG ZONE, TotalLMP
DAY AHEAD ELECTRICITY- PJM-WEST- ATC DAY	See ISDA De	efinition		
AHEAD ELECTRICITY- PJM-WEST- OFF PEAK DAY AHEAD	Eastern Off-Peak	РЈМ	http://www.pjm.com/markets-and- operations/energy/day-ahead/lmpda.aspx	WESTERN HUB, TotalLMP
ELECTRICITY- PJM-WEST- PEAK DAY AHEAD	Eastern Peak	РЈМ	http://www.pjm.com/markets-and- operations/energy/day-ahead/lmpda.aspx	WESTERN HUB, TotalLMP
ELECTRICITY- PJM-WEST HUB-ATC REALTIME	N/A	РЈМ	http://www.pjm.com/markets-and- operations/energy/real-time/lmp.aspx	WESTERN HUB HUB, TotalLMP
ELECTRICITY- PJM-WEST HUB-OFF PEAK REAL TIME	Eastern Off Peak	РЈМ	http://www.pjm.com/markets-and- operations/energy/real-time/lmp.aspx	WESTERN HUB HUB, TotalLMP
ELECTRICITY- PJM-WEST HUB-OFF PEAK REAL TIME	Eastern Peak	РЈМ	http://www.pjm.com/markets-and- operations/energy/real-time/lmp.aspx	WESTERN HUB HUB, TotalLMP
ELECTRICITY- NYISO-NY ZONE A-ATC DAY AHEAD	See ISDA De	efinition		L
ELECTRICITY- NYISO-NY ZONE A-OFF PEAK DAY AHEAD	Eastern Off Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x.jsp (Report Type: Day-Ahead Market LBMP/Zonal)	WEST, LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE A- PEAK DAY AHEAD	Eastern Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x.jsp (Report Type: Day-Ahead Market LBMP/Zonal)	WEST, LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE A-ATC DAY AHEAD	ATC	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x.jsp (Report Type: Day-Ahead Market LBMP/Zonal)	WEST, LBMP (\$/MWHr)

ELECTRICITY- NYISO-NY ZONE A-OFF PEAK DAY AHEAD	Eastern Off Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x.jsp (Report Type: Day-Ahead Market LBMP/Zonal)	WEST, LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE A- PEAK DAY AHEAD	Eastern Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x.jsp (Report Type: Day-Ahead Market LBMP/Zonal)	CENTRL, LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE C-ATC DAY AHEAD	ATC	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x.jsp (Report Type: Day-Ahead Market LBMP/Zonal)	CENTRL, LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE C-OFF PEAK DAY AHEAD	Eastern Off Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x_jsp (Report Type: Day-Ahead Market LBMP/Zonal)	CENTRL, LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE C- PEAK DAY AHEAD	Eastern Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x_jsp (Report Type: Day-Ahead Market LBMP/Zonal)	CENTRL, LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE G-ATC DAY AHEAD	See ISDA De	efinition		
ELECTRICITY- NYISO-NY ZONE G-OFF PEAK DAY AHEAD	Eastern Off Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x.jsp (Report Type: Day-Ahead Market LBMP/Zonal)	HUD VL, LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE G- PEAK DAY AHEAD	Eastern Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x.jsp (Report Type: Day-Ahead Market LBMP/Zonal)	HUD VL, LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE H-ATC DAY AHEAD	See ISDA Definition			
ELECTRICITY- NYISO-NY ZONE H-OFF PEAK DAY AHEAD	Eastern Off Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x_jsp (Report Type: Day-Ahead Market LBMP/Zonal)	N.Y.C., LBMP (\$/MWHr)
ELECTRICITY- NYISO-NY ZONE H- PEAK DAY AHEAD	Eastern Peak	NYISO	http://www.nyiso.com/public/markets_o perations/market_data/pricing_data/inde x_jsp (Report Type: Day-Ahead Market LBMP/Zonal)	N.Y.C., LBMP (\$/MWHr)
ELECTRICITY- CAISO-NP 15			nodity Definitions, will be calculated as the v PEAK-ICE and ELECTRICITY-NP15- OF	

ATC	Commodity Reference Prices for the relevant period, weighted on the basis of the number of hourly periods in the relevant period which are peak and off-peak respectively (with peak and off peak having the meaning specified in the definition of the Commodity Reference Price by the Exchange).
ELECTRICITY-	Notwithstanding the Commodity Definitions, will be calculated as the weighted average of
CAISO-SP 15	the ELECTRICITY-SP15- PEAK-ICE and ELECTRICITY-SP15- OFF-PEAK-ICE
ATC	Commodity Reference Prices for the relevant period, weighted on the basis of the number of
	hourly periods in the relevant period which are peak and off-peak respectively (with peak and
	off peak having the meaning specified in the definition of the Commodity Reference Price by
	the Exchange).
ELECTRICITY-	Notwithstanding the Commodity Definitions, will be calculated as the weighted average of
PALO VERDE	the ELECTRICITY-PALO VERDE PEAK-ICE and ELECTRICITY-PALO VERDE OFF-
ATC-ICE	PEAK-ICE Commodity Reference Prices for the relevant period, weighted on the basis of the
	number of hourly periods in the relevant period which are peak and off-peak respectively
	(with peak and off peak having the meaning specified in the definition of the Commodity
	Reference Price by the Exchange)
ELECTRICITY-	Notwithstanding the Commodity Definitions, will be calculated as the weighted average of
MID C ATC-	the ELECTRICITY-MID C PEAK-ICE and ELECTRICITY-MID C OFF-PEAK-ICE
ICE	Commodity Reference Prices for the relevant period, weighted on the basis of the number of
	hourly periods in the relevant period which are peak and off-peak respectively (with peak and
	off peak having the meaning specified in the definition of the Commodity Reference Price by
	the Exchange)

U.S. Electricity - Fixed/Floating Swap Contracts Specified Time Periods

	Non-FERC Holidays (all times are Hours Ending and use 24-hour clock)	FERC Holidays
California Off Peak	Excludes 0700 through 2200 Pacific	Includes all hours on FERC
	Prevailing Time	Holidays
California Peak	Includes 0700 through 2200 Pacific	Excludes all hours on FERC
Camorina i cak	Prevailing Time	Holidays
Eastern Off Peak <sup>1</sup>	Excludes 0800 through 2300 Eastern	Includes all hours on FERC
	Prevailing Time	Holidays
Eastern Peak	Includes 0800 through 2300 Eastern	Excludes all hours on FERC
	Prevailing Time	Holidays

<sup>&</sup>lt;sup>1</sup> Times for Commodity Reference Prices reported for Central Timezone (e.g., Illinois, Michigan) will be converted to their Eastern time equivalents

## USD Equity Basket Swap (Broad Based)

Summary:	This covers equity total-return swaps on broad-based
	baskets of equities traded in USD.
	For purposes of relevant CFTC and SEC regulations, such
	basket shall be on a broad-based index.
Limitations on Available Selections and Default Settings:	The terms under which USD Equity Basket Swap (Broad Based) may be traded are shown below or in the attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	For Business Days, the defaults shall be the locations
	specified for the relevant currency, any additional
	locations specified for the relevant Floating Rate Options.
	In many cases there are normal "vanilla" terms on which
	the parties will transact. These are shown as "Default" and will apply unless the
	parties vary them.
	In some cases, the same contract might have different
	terms depending on the market in which it is traded (e.g.,
	London versus NY).
	In that case the default settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and standards:
	(a) 2006 ISDA Definitions; (b) 2002 ISDA Equity Derivatives Definitions; and
	(b) 2002 ISDA Equity Derivatives Definitions; and (c) Annex SS to 2004 Americas Interdealer Master Equity
	Derivatives Confirmation (except that references therein
	to the 2000 ISDA Definitions shall be deemed references
	to the 2006 ISDA Definitions).
	For convenience, certain terms are mapped to their FpML
	5.5 equivalent.
Product Type/ISDA OTC Taxonomy: ISDA OTC Asset Class:	Equity
ISDA OTC Asset Class. ISDA OTC Base Product:	Equity Swap
ISDA OTC Sub-Product:	Price Return Basic Performance
ISDA OTC Transaction type:	Basket
Further Limitations:	None
Terms:	
Type of Transaction:	Share Basket Swap Transaction
Trade Date:	As agreed by the parties.
Notional Amount ("notional"):	An amount in USD agreed by the parties.
Effective Date ("effectiveDate"):	Per Annex SS, unless otherwise agreed by the parties.
Effective Date Business Days:	As specified by the parties from among the Available Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Termination Date ("terminationDate"):	Per Annex SS, unless otherwise specified by the parties.
Basket:	As specified by the parties in compliance with the rules

Tender Offer: Share-for-Share	As per Annex SS, unless otherwise agreed by the parties. As agreed by the parties if Tender Offer is applicable.	
	As per Appen SS uplace otherwise acread by the partice	
Consequences of Tender Offers:		
options Exemuige.	Adjustment" is applicable.	
Options Exchange:	As agreed by the parties if "Options Exchange	
Share-for-Combined:	As per Annex SS unless otherwise agreed by the parties.	
Share-for-Other:	As per Annex SS unless otherwise agreed by the parties.	
Share-for-Share:	As per Annex SS unless otherwise agreed by the parties.	
Consequences of Merger Events:		
Options Exchange:	As agreed by the parties if "Options Exchange Adjustment" is applicable.	
Method of Adjustment:	As per Annex SS unless otherwise agreed by the parties.	
Adjustment Events:		
Dividend Recovery:	As per Annex SS unless otherwise agreed by the parties.	
Reinvestment of Dividends:	Inapplicable	
	otherwise agreed by the parties.	
Relevant Dividend:	If type of return is "Total Return" as per Annex SS unless	
Dividend Amount:	As per Annex SS unless otherwise agreed by the parties.	
Dividend Period:	As per Annex SS unless otherwise agreed by the parties.	
Dividend Payment Date(s):	As per Annex SS unless otherwise agreed by the parties.	
Dividends:		
Settlement Currency:	USD	
Cash Settlement:	Applicable	
Settlement Terms:		
Dates):	parties.	
Business Day Convention (Other Than Payment	As per Annex SS, unless otherwise specified by the	
Business Days (Other Than Payment Dates):	As specified by the parties.	
Payment Dates Business Days:	As specified by the parties.	
Reset Date ("resetDate"):	As specified by the parties.	
Day Count Fraction:	Actual/360	
Spread:	As specified by the parties.	
Designated Maturity ('indexTenor'')	As specified by the parties.	
Floating Rate Option ("floatingRateIndex"):	As per Annex SS, unless otherwise agreed by the parties.	
Payment Dates:	As per Annex SS, unless otherwise agreed by the parties.	
	As per Annex SS.	
Notional Amount ("notionalAmount"):		
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.	
Floating Amount:		
Valuation Date:	As specified by the parties.	
Valuation Time:	As per Annex SS unless otherwise agreed by the parties.	
Final Price:	As per Annex SS unless otherwise agreed by the parties.	
linuar Filce.	with Annex SS.	
Initial Price:	As specified by the parties and adjusted in accordance	
Type of Return:	Total Return	
Equity Notional Amount: Equity Notional Reset:	Per Annex SS.	
Equity Amount Payer ( payerPartyReference ): Equity Notional Amount:	As specified by the parties.	
Equity Amounts: Equity Amount Payer ("payerPartyReference"):	As specified by the parties.	
Determining Party: Equity Amounts:	As specified by the parties.	
Hedging Party:	As specified by the parties.	
Related Exchanges:	Per Annex SS, unless otherwise agreed by the parties.	
	comprised in the Basket.	
Exchange(s):	As specified by the parties with respect to each Share	
	broad-based indices.	

Share-for-Other:	As agreed by the parties if Tender Offer is applicable.	
Share-for-Combined:	As agreed by the parties if Tender Offer is applicable.	
Options Exchange:	As agreed by the parties if "Options Exchange	
	Adjustment" is applicable.	
Composition of Combined Consideration:	Per Annex SS unless otherwise agreed by the parties.	
Nationalization, Insolvency or Delisting:	Per Annex SS unless otherwise agreed by the parties.	
Additional Disruption Events:		
Change in Law:	As per Annex SS, unless otherwise agreed by the parties.	
Insolvency Filing:	As per Annex SS, unless otherwise agreed by the parties.	
Hedging Disruption:	As per Annex SS.	
Increased Cost of Hedging:	As per Annex SS unless otherwise agreed by the parties.	
Loss of Stock Borrow:	Inapplicable	
Increased Cost of Stock Borrow:	Inapplicable	
Increased Cost of Stock Borrow: Non-Reliance:	Inapplicable           As per Annex SS unless otherwise agreed by the parties.	
Non-Reliance:	As per Annex SS unless otherwise agreed by the parties.	
Non-Reliance: Agreements and Acknowledgements Regarding	As per Annex SS unless otherwise agreed by the parties.	
Non-Reliance: Agreements and Acknowledgements Regarding Hedging Activities:	As per Annex SS unless otherwise agreed by the parties. As per Annex SS.	
Non-Reliance: Agreements and Acknowledgements Regarding Hedging Activities: Additional Acknowledgements:	As per Annex SS unless otherwise agreed by the parties.         As per Annex SS.         As per Annex SS unless otherwise agreed by the parties.	
Non-Reliance:         Agreements and Acknowledgements Regarding         Hedging Activities:         Additional Acknowledgements:         Index Disclaimer:	As per Annex SS unless otherwise agreed by the parties.         As per Annex SS.         As per Annex SS unless otherwise agreed by the parties.         As per Annex SS unless otherwise agreed by the parties.	
Non-Reliance:Agreements and Acknowledgements RegardingHedging Activities:Additional Acknowledgements:Index Disclaimer:Mutual Early Termination Right:	As per Annex SS unless otherwise agreed by the parties.         As per Annex SS.         As per Annex SS unless otherwise agreed by the parties.         As per Annex SS unless otherwise agreed by the parties.         As agreed by the parties.	

## Equity Index Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

#### Equity Index Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termination
	Date		Date	Date
N/A	N/A	N/A	N/A	One Year from
				Effective Date

## Equity Index Notional Amounts

Currency	Minimum	Increment	Maximum	Default
USD	10,000,000	1,000,000	N/A	N/A

## Equity Index Requirements and Defaults

Date	Requirement	Default
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation		longer than the actual Calculation
		Period length

Mr. Christopher J. Kirkpatrick May 20, 2020

## EXHIBIT III

tpSEF Rulebook – Appendix B (Marked)

tpSEF Inc. Rulebook Appendix B

# tpSEF Inc. Swap Specifications

Effective March 20 May 15, 2020

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## **Agricultural Options**

Summary:	This covers uncleared agricultural options ("Agricultural Options").	
Limitations on Available Selections and Default	The terms under which Agricultural Options may be	
Settings:	traded are shown below and in the attached tables.	
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards: 2005 ISDA Commodity Derivatives Definitions ("Commodity Definitions")	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Commodity	
ISDA OTC Base Product:	Agricultural	
ISDA OTC Settlement type:	Cash	
Further Limitations:	None	
Terms:		
Trade Date:	As agreed by the parties.	
Commodity:	As specified by the parties from among the Available Commodities.	
Notional Quantity:	The sum of the Notional Quantities per Calculation Period.	
Notional Quantity per Calculation Period:	For an Asian Option, as specified by the parties on a per-Calculation-Period Basis.	
Calculation Period(s):	For an Asian Option, as specified by the parties.	
Calculation Period Business Days:	None, unless specified by the parties.	
Calculation Period Business Day Convention:	For an Asian Option, as specified by the parties from among the Available Business Day Conventions.	
Option Style:	As specified by the parties from among the Available Option Styles.	
Option Type:	As specified by the parties from among the Available Option Types.	
Buyer:	As specified by the parties.	
Seller:	As specified by the parties.	
Commodity Reference Price:	As specified by the parties from among the Available Commodity Reference Prices.	
Business Day:	As specified by the parties.	
Pricing Date(s):	As specified by the parties.	
Method of Averaging:	For Asian Options, as specified by the parties or otherwise per the Commodity Definitions.	
Strike Price per Unit:	As specified by the parties.	
Total Premium:	As specified by the parties.	
Premium Payment Date(s):	As specified by the parties, subject to adjustment in accordance with the Business Day Convention.	
Premium Payment Date Business Days:	Per the Available Currencies, plus such additional Business Days as the parties specify.	
Premium Payment Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions or otherwise per the Commodity Definitions.	

Procedure for Exercise:		
Exercise Period:	For an American Option, the period of days and the	
	times on such days specified by the parties.	
	For any other Option Style, the times on the Expiration	
	Date or Potential Exercise Date specified by the parties.	
Potential Exercise Dates:	For a Bermuda Option, the days specified by the parties.	
Expiration Date:	As specified by the parties.	
Expiration Time:	As specified by the parties.	
Automatic Exercise:	Applicable, unless otherwise specified by the parties.	
Written Confirmation:	As specified by the parties.	
Seller's Notice Information:	As specified by the Seller.	
Market Disruption:		
Market Disruption Events:	Unless otherwise specified by the parties, per the	
-	Commodity Definitions.	
Additional Market Disruption Events:	As specified by the parties.	
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Disruption Fallbacks:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Fallback Reference Price:	None, unless specified by the parties.	
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Cash Settlement Terms:		
Cash Settlement:	Applicable	
Settlement Dates:	As specified by the parties, subject to adjustment in	
	accordance with the Business Day Convention.	
Calculation Agent:	As agreed by the parties.	

#### Agricultural Option Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY
EUR	Euro	EUTA
GBP	Sterling	GBLO

#### Agricultural Options Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

#### Agricultural Option Available Option Style

	ISDA Name
American	
European	
Bermuda	
Asian	

## Agricultural Options Available Commodity Reference Prices

#### **ISDA Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

ISDA Definition
COCOA-GBP-EURONEXT
COCOA-NYBOT <sup>1</sup>
COFFEE ARABICA-NYBOT <sup>1</sup>
COFFEE ROBUSTA-EURONEXT
CORN-CBOT
COTTON NO. 2-NYBOT <sup>1</sup>
FROZEN CONCENTRATED ORANGE JUICE NO. 1-NYBOT <sup>1</sup>
LEAN HOGS-CME
MILK-CLASS III-CME
MILK-CLASS IV-CME
SOYBEAN-CBOT
SOYBEAN MEAL-CBOT
SOYBEAN OIL-CBOT
SUGAR #11 (WORLD)-NYBOT <sup>1</sup>
WHEAT-CBOT
WHEAT HRM-KCBOT
WHITE SUGAR-EURONEXT

#### **Exchange Definitions**

The following Commodity Reference Prices are as defined in the Commodity Price Reference Framework in Sub-Annex A to the Commodity Definitions.

ISDA Definition					
Commodity	Relevant	<b>Relevant Unit</b>	Exchange	Currency	Specified Price
Reference	Commodity				
Price					
BUTTER-CME	Butter	Pound	CME Globex	USD 0.01	Settlement Price
CHEESE-CME	Cheese	Pound	CME Globex	USD 0.01	Settlement Price
CRUDE PALM	Crude Palm Oil	Metric Ton	CME Globex	USD 0.01	Settlement Price
OIL-CME					
DRY WHEY-	Dry Whey	Pound	CME Globex	USD 0.01	Settlement Price
CME					
HARD RED	Wheat	Bushel	Minneapolis	USD 0.01	Settlement Price
SPRING			Grain Exchange		
WHEAT-			_		
MGEX					
MILLING	Wheat	Tonne	EURONEXT	EUR 0.01	Settlement Price
WHEAT-			LIFFE		
EURONEXT					
NONFAT DRY	Non-Fat Dry	Pound	CME Globex	USD 0.01	Settlement Price
MILK-CME	Milk				
RAPESEED-	Rapeseed	Tonne	EURONEXT	EUR 0.01	Settlement Price
EURONEXT	_		LIFFE		

<sup>&</sup>lt;sup>1</sup>The New York Board of Trade (NYBOT) was renamed ICE Futures US in 2007.

## **Basis Swaps**

Summary:	This covers basis swaps ("Basis Swaps").
Limitations on Available Selections and Default	The terms under which a Basis Swap may be traded are
Settings:	as specified in these terms and conditions and in the
	attached tables.
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.
	Lucsi.
	For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made. For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.
	In some cases, the same contract might have different terms depending on the market in which it is traded ( <i>e.g.</i> , London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards: (a) 2006 ISDA Definitions (b) ISDA Settlement Matrix (if Optional Early
	Termination applies)
	(c) ISDA OTC Taxonomies
	(d) FpML Location Codes
	For convenience, certain terms are mapped to their FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Basis
Further Limitations:	None

Terms:		
Notional Amount ("notional"):	An amount in one of the Available Currencies (see	
	below) agreed by the parties.	
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance	
	with any applicable Business Day Convention.	
	The parties may express the unadjusted Effective Date	
	as a number of Business Days or Banking Days from the	
	Trade Date ("relativeEffectiveDate").	
Effective Date Business Days:	As specified by the parties from among the Available	
	Business Days.	
Effective Date Business Day Convention:	As specified by the parties from among the Available	
	Business Day Conventions.	
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance	
	with any applicable Business Day Convention.	
	The parties may express the unadjusted Termination	
	Date as a number of days, months or years from the	
	Effective Date ("relativeTerminationDate").	
Termination Date Business Day Convention:	As specified by the parties from among the Available	
	Business Day Conventions.	
Floating Amount 1 ("FA1"):		
FA1 Payer ("payerPartyReference"):	As specified by the parties.	
FA1 Currency Amount ("notionalAmount"):	As specified by the parties.	
FA1 Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.	
FA1 first Period End Date:	As specified by the parties if there is a short initial	
TAT first renou End Date.	Calculation Period.	
FA1 Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.	
FA1 initial Floating Rate:	As specified by the parties.	
FA1 Floating Rate Option ("floatingRateIndex"):	As specified by the parties.	
FA1 Designated Maturity ('indexTenor"):	As specified by the parties.	
FA1 Linear Interpolation:	For the Calculation Periods specified by the parties.	
FA1 Shorter Designated Maturity for Linear	For a Calculation Period to which Linear Interpolation	
Interpolation:	applies, as specified by the parties.	
FA1 Longer Designated Maturity for Linear	For a Calculation Period to which Linear Interpolation	
Interpolation:	applies, as specified by the parties.	
FA1 Spread:	As specified by the parties.	
FA1 Day Count Fraction:	As specified by the parties.	
FA1 Reset Dates ("resetDate"):	As specified by the parties.	
FA1 Method of Averaging:	As specified by the parties.	
FA1 Compounding:	As specified by the parties.	
FA1 Compounding Dates:	In the event Compounding is selected, as selected by the	
	parties.	
FA1 Compounding Method (Compounding OR Flat	In the event Compounding is selected, as selected by the	
Compounding):	parties.	
FA1 Period End Dates Business Days:	As specified by the parties from among the Available	
	Business Days.	
FA1 Period End Dates Business Day Convention:	As specified by the parties from among the Available	
	Business Day Conventions.	
FA1 Payment Dates Business Days:	As specified by the parties from among the Available	
	Business Days, subject to any Required Business Days	
FA1 Payment Dates Business Day Convention:	As specified by the parties from among the Available	
	Business Day Conventions.	
FA1 Reset Dates Business Days:	As specified by the parties from among the Available	
	Business Days, subject to any Required Business Days.	

FA1 Reset Dates Business Day Convention:	As specified by the parties from among the Available
FAT Reset Dates Business Day Convention:	Business Day Conventions.
Floating Amount 2 ("FA 2").	Business Day Conventions.
Floating Amount 2 ("FA2"):	As specified by the parties
FA2 Payer ("payerPartyReference"):	As specified by the parties.
FA2 Currency Amount ("notionalAmount"):	As specified by the parties.
FA2 Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
FA2 first Period End Date:	As specified by the parties if there is a short initial
rA2 lifst renou End Date.	Calculation Period.
FA2 Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
FA2 initial Floating Rate:	As specified by the parties.
FA2 Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
FA2 Designated Maturity ("indexTenor"):	As specified by the parties.
FA2 Linear Interpolation:	For the Calculation Periods specified by the parties.
FA2 Shorter Designated Maturity for Linear	For a Calculation Periods specified by the parties.
Interpolation:	applies, as specified by the parties.
FA2 Longer Designated Maturity for Linear	For a Calculation Period to which Linear Interpolation
Interpolation:	applies, as specified by the parties.
FA2 Spread:	As specified by the parties.
FA2 Day Count Fraction:	As specified by the parties.
FA2 Reset Dates ("resetDate"):	As specified by the parties.
FA2 Method of Averaging:	As specified by the parties.
FA2 Compounding:	As specified by the parties.
FA2 Compounding Dates:	In the event Compounding is selected, as selected by the
FA2 Compounding Dates.	parties.
FA2 Compounding Method (Compounding OR Flat	In the event Compounding is selected, as selected by the
Compounding):	parties.
FA2 Period End Dates Business Days:	As specified by the parties from among the Available
TA2 Teriod End Dates Dusiness Days.	Business Days.
FA2 Period End Dates Business Day Convention:	As specified by the parties from among the Available
112 Terrod End Duces Dusiness Day Convention.	Business Day Conventions.
FA2 Payment Dates Business Days:	As specified by the parties from among the Available
	Business Days, subject to any Required Business Days.
FA2 Payment Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
FA2 Reset Dates Business Days:	As specified by the parties from among the Available
····	Business Days, subject to any Required Business Days.
FA2 Reset Dates Business Day Convention:	As specified by the parties from among the Available
5	Business Day Conventions.
Mark-to-Market Currency Swap:	
Mark-to-Market Currency Swap:	As specified by the parties, if the Currency Amounts are
	in different Currencies.
Variable Currency Payer:	As specified by the parties if the transaction is a Mark-
	to-Market Currency Swap.
Constant Currency Payer:	As specified by the parties if the transaction is a Mark-
	to-Market Currency Swap.
Currency Exchange Rate:	As specified by the parties if the transaction is a Mark-
	to-Market Currency Swap and ISDA MTM Matrix is
	not applicable.
ISDA MTM Matrix:	As specified by the parties if the transaction is a Mark-
	to-Market Currency Swap.
Initial Exchange:	
Initial Exchange Date:	As specified by the parties.
FA1 Payer Initial Exchange Amount:	As specified by the parties.

FA2 Payer Initial Exchange Amount:	As specified by the parties.	
Interim Exchanges:		
Interim Exchange Dates:	As specified by the parties.	
FA1 Payer Interim Exchange Amount:	As specified by the parties.	
FA2 Payer Interim Exchange Amount:	As specified by the parties.	
Final Exchanges:		
Final Exchange Date:	As specified by the parties.	
FA1 Payer Final Exchange Amount:	As specified by the parties.	
FA2 Payer Final Exchange Amount:	As specified by the parties.	
Optional Early Termination:		
Optional Early Termination:	As specified by the parties.	
Option Style:	As specified by the parties.	
Optional Early Termination Date:	As specified by the parties.	
Seller:	As specified by the parties if only one party can	
benet.	terminate.	
Buyer:	As specified by the parties, if only one party can terminate.	
Seller's Agent:	As specified by the parties, if only one party can terminate.	
Business Days for Payments:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.	
Exercise Business Days:	As specified by the parties.	
<b>Optional Early Termination Procedure for Exercise:</b>		
Commencement Date:	As specified by the parties, if the Option Style is American.	
Bermuda Option Exercise Dates:	As specified by the parties, if the Option Style is Bermuda.	
Expiration Date:	As specified by the parties.	
Expiration Time:	As specified by the parties.	
Earliest Exercise Time:	As specified by the parties.	
Latest Exercise Time:	As specified by the parties.	
Exercise Business Day:	As specified by the parties.	
Partial Exercise:	As specified by the parties, if Option Style is European.	
Multiple Exercise:	As specified by the parties, if Option Style is American or Bermuda.	
Minimum Notional Amount:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.	
Maximum Notional Amount:	As specified by the parties if Multiple Exercise is specified.	
Integral Multiple:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.	
<b>Optional Early Termination Settlement Terms:</b>	maniple Exercise is specified.	
Cash Settlement:	As specified by the parties.	
ISDA Settlement Matrix:	As specified by the parties. As specified by the parties, if Cash Settlement is	
	applicable to a single currency Transaction.	
ISDA Cross Currency Settlement Matrix:	As specified by the parties, if Cash Settlement is	
·	applicable to a cross currency Transaction whose	
	currencies are listed as a "currency pair" in the Cross	
Cash Settlement Valuation Time:	Currency Settlement Matrix.	
Cash Settlement Valuation Time:	Currency Settlement Matrix. If Cash Settlement is applicable, as specified by the	
Cash Settlement Valuation Time: Cash Settlement Valuation Date:	Currency Settlement Matrix.	

Valuation Business Days:	If Cash Settlement is applicable, as specified by the
	parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the
	parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date Business Days	If Cash Settlement is applicable, as specified by the
Convention:	parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the
	parties from Available Cash Settlement Methods,
	directly or via the ISDA Settlement Matrix.
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or
·	"Cash Price—Alternate" apply, as specified by the
	parties from Available Cash Settlement Methods,
	directly or via the ISDA Settlement Matrix.
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield
	Curve—Adjusted," "Par Yield Curve—Unadjusted" or
	"Zero Coupon Curve—Adjusted" apply, as specified by
	the parties from Available Cash Settlement Methods,
	directly or via the ISDA Settlement Matrix parties from
	Available Cash Settlement Methods, directly or via the
	ISDA Settlement Matrix.
Cash Settlement Reference Banks:	As specified by the parties, if Settlement Rate is
	applicable.
Cash Settlement Reference Banks:	If Cash Settlement is applicable, as specified by the
	parties.
Quotation Rate:	If Cash Settlement is applicable, as specified by the
	parties from among the Available Quotation Rates.
Calculation Agent:	As agreed by the parties.

## Basis Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	CATO
CHF	Swiss Franc	CHZU
CLP	Chilean Peso	CLSA
CZK	Czech Koruna	CZPR
DKK	Danish Krone	DKCO
EUR	Euro	EUTA
GBP	Sterling	GBLO
HKD	Hong Kong Dollar	НКНК
HUF	Hungarian Forint	HUBU
JPY	Japanese Yen	JPTO
MXN	New Mexican Peso	MXMC
NOK	Norwegian Krone	NOOS
NZD	New Zealand Dollar	NZAU and NZWE
PLN	Polish Zloty	PLWA
SEK	Swedish Krona	SEST
SGD	Singapore Dollar	SGSI
TRY	Turkish Lira	TRIS
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

### Basis Available Business Day Conventions

ISDA Name	
Following	
Modified/Modified Following	
No Adjustment	
Preceding	
FRN Convention/Eurodollar Convention	

#### Basis Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

#### Basis Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP, MXN, ZAR	Plus Two Banking Days
MXN	Plus One Banking Day
CAD, GBP, ZAR	Plus Zero

#### Basis Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termination
	Date		Date	Date
N/A	N/A	N/A	N/A	N/A

#### **Basis Notional Amounts**

Currency	Minimum	Increment	Maximum	Default
AUD	5,000,000	100,000	N/A	N/A
CAD	25,000,000	1,000,000	N/A	N/A
CHF	5,000,000	100,000	N/A	N/A
CLP	5,000,000	100,000	N/A	N/A
CZK	5,000,000	100,000	N/A	N/A
DKK	5,000,000	100,000	N/A	N/A
EUR	5,000,000	100,000	N/A	N/A
GBP	5,000,000	100,000	N/A	N/A
HKD	5,000,000	100,000	N/A	N/A
HUF	5,000,000	100,000	N/A	N/A
JPY	5,000,000	100,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
NOK	5,000,000	100,000	N/A	N/A
NZD	5,000,000	100,000	N/A	N/A
PLN	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
SGD	5,000,000	100,000	N/A	N/A
TRY	5,000,000	100,000	N/A	N/A
USD	5,000,000	100,000	N/A	N/A

ZAR 5,000,000 100,000	N/A	N/A

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-AONIA-OIS- COMPOUND- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR- AUBBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Swap Rate- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-CDOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-CORRA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν

Basis Floating Rate Options and Defaults

CAD-LIBOR-BBA Bioomberg CAD-LIBOR-BBA- Bioomberg CAD-LIBOR-BBA- All quoted tenors N/A Per ISDA 2006 CAD-LIBOR-BBA- All quoted tenors N/A Per ISDA 2006 CBLO (Applies to Bot Legs) CAD-LIBOR- Reference Banks All quoted tenors N/A Per ISDA 2006 N CAD-TBILL- SDA 11 quoted tenors N/A Per ISDA 2006 N CAD-TBILL- SDA 11 quoted tenors N/A Per ISDA 2006 N CAD-TBILL- Reference Banks All quoted tenors N/A Per ISDA 2006 N CHF-ISDA-Basis Swaps-11:00-ICAP All quoted tenors N/A Per ISDA 2006 N CHF-ISDA	Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Bioomberg     All quoted tenors     N/A     Per ISDA 2006     Tegs)       CAD-LIBOR-BBA- SwapMarker     All quoted tenors     N/A     Per ISDA 2006     GBLO (Applies to Bott Legs)       CAD-LIBOR- Reference Banks     All quoted tenors     N/A     Per ISDA 2006     GBLO (Applies to Bott Legs)       CAD-TIBLL- Reference Banks     All quoted tenors     N/A     Per ISDA 2006     N       CAD-TBILL- Reference Banks     All quoted tenors     N/A     Per ISDA 2006     N       CAD-TBILL-Reuters     All quoted tenors     N/A     Per ISDA 2006     N       CAD-TBILL-Reuters     All quoted tenors     N/A     Per ISDA 2006     N       CAD-TBILL-Reuters     All quoted tenors     N/A     Per ISDA 2006     N       CAD-TBILL-Reuters     All quoted tenors     N/A     Per ISDA 2006     N       CAD-TBILL-Reuters     All quoted tenors     N/A     Per ISDA 2006     N       CHF-INDI-CAP     All quoted tenors     N/A     Per ISDA 2006     N       CHF-Annual Swap     All quoted tenors     N/A     Per ISDA 2006     N       CHF-Annual Swap     All quoted tenors     N/A     Per ISDA 2006     N       CHF-Annual Swap     All quoted tenors     N/A     Per ISDA 2006     N       CHF-LBOR-BBA     All quoted tenors	CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
SwapMarker       All quoted tenors       N/A       Per ISDA 2006       Legs)         CAD-LIBOR- Reference Banks       All quoted tenors       N/A       Per ISDA 2006       GBLO (Applies to Bott Legs)         CAD-REPO-CORRA       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL- Reference Banks       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL- Reference Banks       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL- Reference Banks       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         CHF-JD-Basis       All quoted tenors       N/A       Per ISDA 2006       N         CHF-Annual Swap       All quoted tenors       N/A       Per ISDA 2006       N         Rate-Reference       All quoted tenors       N/A       Per ISDA 2006       N         Rate-Reference       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LIBOR-BBA       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LIBOR-BBA-		All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
Reference Banks       All quoted tenors       N/A       Per ISDA 2005       Legs)         CAD-REPO-CORRA       All quoted tenors       N/A       Per ISDA 2006       N         CAD-REPO-CORRA       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-ISDD       All quoted tenors       N/A       Per ISDA 2006       N         Reference Banks       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         CHF-JAnnual Swap       All quoted tenors       N/A       Per ISDA 2006       N         Rate       All quoted tenors       N/A       Per ISDA 2006       N         CHF-JAnnual Swap       All quoted tenors       N/A       Per ISDA 2006       N         Rate       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LIBOR-BBA       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LIBOR-IBBA-       All quoted tenors       N/A       Per ISDA 2006		All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-TBILL-ISDD       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL- Reference Banks       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Telerate       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Telerate       All quoted tenors       N/A       Per ISDA 2006       N         CHF-ISDA-FILO-TCAP       All quoted tenors       N/A       Per ISDA 2006       N         Swaps-11:00-TCAP       All quoted tenors       N/A       Per ISDA 2006       N         Rate       All quoted tenors       N/A       Per ISDA 2006       N         Rate       All quoted tenors       N/A       Per ISDA 2006       N         Rate       All quoted tenors       N/A       Per ISDA 2006       N         Rate       All quoted tenors       N/A       Per ISDA 2006       N         CHF-IBOR-BBA       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LIBOR-ISDA       All quoted tenors       N/A       Per ISDA 2006       N         CHF-OIS-II:00- CHF-OIS-OIS- COS- CHF-OIS-OIS- COS- COS- CHF-OIS-OIS- COS- COS-       All quoted tenors	CAD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-TBILL- Reference Banks       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         CAD-TBILL-Telerate       All quoted tenors       N/A       Per ISDA 2006       N         CHF-USD-Basis       All quoted tenors       N/A       Per ISDA 2006       N         Swaps-11:00-ICAP       All quoted tenors       N/A       Per ISDA 2006       N         CHF-JAnnual Swap       All quoted tenors       N/A       Per ISDA 2006       N         Rate       All quoted tenors       N/A       Per ISDA 2006       N         Banks       CHF-JBAR-Swap       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LBOR-BBA       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LBOR-BBA       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LBOR-BBA       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LBOR-BBA-       All quoted tenors       N/A       Per ISDA 2006       N         CHF-LBOR-ISDA       All quoted tenors       N/A	CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	Ν
Reference BanksAll quoted tenorsN/APer ISDA 2006NCAD-TBILL-ReutersAll quoted tenorsN/APer ISDA 2006NCAD-TBILL-TelerateAll quoted tenorsN/APer ISDA 2006NCHF USD-Basis waps-11:00-ICAPAll quoted tenorsN/APer ISDA 2006NCHF-Annual Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-Annual Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-ISDAFIX-Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-ISDAFIX-Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BBAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BBA- BloombergAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BBA- BloombergAll quoted tenorsN/APer ISDA 2006NCHF-IDS-OIS- COMPOUNDAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quoted tenorsN/AA/360NCLP-CLICP- BloombergAll quoted tenorsN/AA/360NCLP-CLICP- BloombergAll quoted tenorsN/AA/360N<	CAD-TBILL-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-TelerateAll quoted tenorsN/APer ISDA 2006NCHF USD-Basis Swaps-11:00-ICAPAll quoted tenorsN/APer ISDA 2006NCHF-Annual Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-Annual Swap Rate-ReferenceAll quoted tenorsN/APer ISDA 2006NCHF-ISDAFIX-Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-ISDAFIX-Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-IJBOR-BBAAll quoted tenorsN/APer ISDA 2006NCHF-IJBOR-BBAAll quoted tenorsN/APer ISDA 2006NCHF-IJBOR-BBA- BloombergAll quoted tenorsN/APer ISDA 2006NCHF-IJBOR-ISDAAll quoted tenorsN/APer ISDA 2006NCHF-IJBOR-ISO-IS- COMPOUNDAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quoted tenorsN/APer ISDA 2006NCLP-Unidad de Formento (UF/CLF)All quoted tenorsN/AA/360NCK-CIBOR- DKNA13All quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenors <td></td> <td>All quoted tenors</td> <td>N/A</td> <td>Per ISDA 2006</td> <td>Ν</td>		All quoted tenors	N/A	Per ISDA 2006	Ν
CHF USD-Basis Swaps-11:00-ICAPAll quoted tenorsN/APer ISDA 2006NSwaps-11:00-ICAPAll quoted tenorsN/APer ISDA 2006NCHF-Annual Swap Rate-ReferenceAll quoted tenorsN/APer ISDA 2006NCHF-Annual Swap Rate-ReferenceAll quoted tenorsN/APer ISDA 2006NBanksCHF-ISDAFIX-Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BBAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BBAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BBA- BloombergAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-ISDAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-ISDAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-ISDAAll quoted tenorsN/APer ISDA 2006NCHF-IJBOR- Reference BanksAll quoted tenorsN/APer ISDA 2006NCHF-OIS-0IS- COMPOUNDAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quoted tenorsN/AA/360NCLP-CLICP- BloombergAll quoted tenorsN/AA/360NCLP-CLICP- BloombergAll quoted tenorsN/AA/360NCLP-CLICP- BloombergAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quote	CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
Swaps-11:00-ICAPAll quoted tenorsN/APer ISDA 2006NCHF-Annual Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-Annual Swap Rate-ReferenceAll quoted tenorsN/APer ISDA 2006NBanksCHF-ISDAFIX-Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-ISDAFIX-Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BBAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BAAll quoted tenorsN/APer ISDA 2006NCHF-UIS-11:00- CCAPAll quoted tenorsN/APer ISDA 2006NCHF-CLCP- BloombergAll quoted tenorsN/APer ISDA 2006NCLP-Unidad de Fomento (UF/CLF)All quoted tenorsN/AA/360NCK-CIBOR- DKNA13All quoted tenorsN/APer ISDA 2006N <td< td=""><td>CAD-TBILL-Telerate</td><td>All quoted tenors</td><td>N/A</td><td>Per ISDA 2006</td><td>Ν</td></td<>	CAD-TBILL-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
RateAll quoted tenorsN/APer ISDA 2006NCHF-Annual Swap Rate-ReferenceAll quoted tenorsN/APer ISDA 2006NCHF-ISDAFIX-Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-ISDAFIX-Swap RateAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BBAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-BBA- BloombergAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-ISDAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-ISDAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-IBAB- BloombergAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-IBABA BloombergAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-IBABA COMPOUNDAll quoted tenorsN/APer ISDA 2006NCHF-OIS-11:00- ICAPAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quoted tenorsN/APer ISDA 2006NCLP-Unidad de Fomento (UF/CLF)All quoted tenorsN/AA/360NCK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- Reference BanksAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- Reference BanksAll quoted tenorsN/APer ISDA 2006N		All quoted tenors	N/A	Per ISDA 2006	Ν
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CHF-LIBOR-BBA- BloombergAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR-ISDAAll quoted tenorsN/APer ISDA 2006NCHF-LIBOR- Reference BanksAll quoted tenorsN/APer ISDA 2006NCHF-OIS-11:00- ICAPAll quoted tenorsN/APer ISDA 2006NCHF-TOIS-OIS- COMPOUNDAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quoted tenorsN/APer ISDA 2006NCLP-Unidad de Fomento (UF/CLF)All quoted tenorsN/AA/360NCK-CIBOR- DKNA13All quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006N	-	All quoted tenors	N/A	Per ISDA 2006	Ν
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Reference BanksAll quoted tenorsN/APer ISDA 2006NCHF-OIS-11:00- ICAPAll quoted tenorsN/APer ISDA 2006NCHF-TOIS-OIS- COMPOUNDAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quoted tenorsN/AA/360NCLP-Unidad de Fomento (UF/CLF)All quoted tenorsN/AA/360NCZK-PRIBOR-PRBOAll quoted tenorsN/AA/360NDKK-CIBOR- DKNA13All quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006N	CHF-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
ICAPAll quoted tenorsN/APer ISDA 2006NCHF-TOIS-OIS- COMPOUNDAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quoted tenorsN/AA/360NCLP-Unidad de Fomento (UF/CLF)All quoted tenorsN/AA/360NCZK-PRIBOR-PRBOAll quoted tenorsN/AA/360NDKK-CIBOR- DKNA13All quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKK-CIBOR- BAll quoted tenorsN/APer ISDA 2006N		All quoted tenors	N/A	Per ISDA 2006	Ν
COMPOUNDAll quoted tenorsN/APer ISDA 2006NCLP-CLICP- BloombergAll quoted tenorsN/AA/360NCLP-Unidad de Fomento (UF/CLF)All quoted tenorsN/AA/360NCZK-PRIBOR-PRBOAll quoted tenorsN/AA/360NDKK-CIBOR- DKNA13All quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006N	CHF-OIS-11:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
BloombergAll quoted tenorsN/AA/360NCLP-Unidad de Fomento (UF/CLF)All quoted tenorsN/AA/360NCZK-PRIBOR-PRBOAll quoted tenorsN/AA/360NDKK-CIBOR- DKNA13All quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006N		All quoted tenors	N/A	Per ISDA 2006	Ν
Fomento (UF/CLF)All quoted tenorsN/AA/360NCZK-PRIBOR-PRBOAll quoted tenorsN/AA/360NDKK-CIBOR- DKNA13All quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006N		All quoted tenors	N/A	A/360	Ν
DKK-CIBOR- DKNA13All quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- Reference BanksAll quoted tenorsN/APer ISDA 2006N		All quoted tenors	N/A	A/360	Ν
DKNA13All quoted tenorsN/APer ISDA 2006NDKK-CIBOR- DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- Reference BanksAll quoted tenorsN/APer ISDA 2006N	CZK-PRIBOR-PRBO	All quoted tenors	N/A	A/360	N
DKNA13-BloombergAll quoted tenorsN/APer ISDA 2006NDKK-CIBOR- Reference BanksAll quoted tenorsN/APer ISDA 2006N		All quoted tenors	N/A	Per ISDA 2006	N
Reference Banks All quoted tenors N/A Per ISDA 2006 N	DKK-CIBOR- DKNA13-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-CIBOR2- All quoted tenors N/A Per ISDA 2006 N		All quoted tenors	N/A	Per ISDA 2006	N
	DKK-CIBOR2-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
DKNA13				
DKK-CITA- DKNA14- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-DKKOIS-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
COMPOUND				
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURONIA- OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA- EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA- EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC5-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-TMM-CDC- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-11:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-SONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA- RONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA- SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR- HIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HKAB	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR- HKAB-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HONIX-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-ISDA-Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-ISDA-Swap Rate-4:00	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly- Annual Swap Rate- 11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
HKD-Quarterly- Annual Swap Rate- 4:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly- Annual Swap Rate- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
HUF-BUBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF- Bloomberg-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF- Bloomberg-15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate-15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR- FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL- TONAR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TONA-OIS-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
COMPOUND				
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-Unidades de Inversión (UDI)	N/A	N/A	See below	Ν
NOK-NIBOR-NIBR	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR-NIBR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-BID	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-FRA	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-NZIONA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-Swap Rate- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-Swap Rate- ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PLN-WIBOR_WIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-SIOR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Reference Banks				
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- VWAP- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-TRYIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reference	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Banks				
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11- FHLBSF	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3- Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3- Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-OIS-11:00- LON-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index- High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SOFR- COMPOUND	All quoted tenors	N/A	Prior to publication of a supplement to ISDA 2006 including USD- SOFR-COMPOUND, not applicable and thereafter, per ISDA 2006	No
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL- Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T500	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-JIBAR-SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν

CLP-Unidad de Fomento (UF/CLF)	For any Reset Date, the difference between the value of the <i>unidad de</i>	
	fomento (UF/CLF) as certified by the Chilean Banco Central de Chile	
	for the calendar day preceding such Reset Date and the value of the	
	unidad de fomento (UF/CLF) as certified by the Chilean Banco	
	Central de Chile for such Reset Date.	
	The Calculation Agent shall convert such difference to the appropri-	
	annualized percentage based on the terms of the Floating Amount	
	payable by reference to the CLP-Unidad de Fomento (UF/CLF).	
	If for any Reset Date there is no published value of the <i>unidad de</i>	
	fomento (UF/CLF) as certified by the Chilean Banco Central de Chile,	
	the Calculation Agent shall determine the CLP-Unidad de Fomento	
	(UF/CLF) for such day.	

#### Definition of CLP-Unidad de Fomento (UF/CLF)

#### Definition of MXN-Unidades de Inversión (UDI)

MXN-Unidades de Inversión (UDI)	For any Reset Date, the difference between the value of the <i>unidad de</i>
MAN-Onidudes de Inversion (ODI)	<i>inversión</i> (UDI) as published by the Mexican <i>Banco de México</i> for the
	calendar day preceding such Reset Date and the value of the <i>unidad</i>
	de inversión (UDI) as published by the Mexican Banco de México for
	such Reset Date.
	The Calculation Agent shall convert such difference to the
	appropriate annualized percentage based on the terms of the Floating
	Amount payable by reference to the CLP MXN-Unidades de
	Inversión (UDI).
	If for any Reset Date there is no published value of the MXN-
	Unidades de Inversión (UDI) as certified by the Mexican Banco de
	México, the Calculation Agent shall determine the CLP MXN-
	Unidades de Inversión (UDI) for such day.

## Basis Requirements and Defaults (Excluding Optional Early Termination and Mandatory Early Termination)

Variable	Requirement	Default
Effective Date Business Day		No Adjustment
Convention:		
Termination Date Business Day		No Adjustment
Convention:		
Period End Dates:		Payment Dates
Payment Date Business Day		Modified Following
Convention:		
Linear Interpolation:		Applicable only to long or short stub
		periods
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation:		longer than the actual Calculation
		Period length
Compounding:		Inapplicable
Compounding Business Day	Same as Business Day Convention	
Convention:	for Period End Dates	
Method of Averaging:	Weighted Average or Unweighted	Unweighted Average
	Average	_
Compounding Method:	Straight Compounding, Flat	
	Compounding, Spread Exclusive	
	Compounding	

ISDA MTM Matrix	Applicable (to Mark-to-Market
	Cross Currency Swaps)
Initial Exchange Date:	Effective Date
Initial Exchange Date Business Day	Following
Convention:	
Interim Exchange Date Business	Modified Following
Day Convention:	
Final Exchange Date:	Termination Date
Final Exchange Date Business Day	Modified Following
Convention:	

#### Definition of USD-SOFR-COMPOUND

From and after the date on which ISDA publishes a supplement to ISDA 2006 containing a definition of USD-SOFR-COMPOUND, per ISDA 2006.

Prior to such date:

"USD-SOFR-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is SOFR). Upon the occurrence of a USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the rate (inclusive of any spreads or adjustments) formally designated, nominated or recommended as the replacement for SOFR by the Federal Reserve Board or a committee officially endorsed or convened by the Federal Reserve Board for purposes of designating, nominating or recommending a replacement for SOFR (which rate may be produced by the Federal Reserve Bank of New York or another administrator). If no such rate is formally designated, nominated or recommended within one U.S. Government Securities Business Day of the USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to OBFR. If at the time of the USD-SOFR-COMPOUND Index Cessation Event, publication of OBFR has been permanently or indefinitely discontinued, it has been publicly announced that OBFR will be permanently or indefinitely discontinued as of a specific date or there has been a public statement by a regulator or other official sector entity prohibiting the use of OBFR (which statement applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions), then the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the FOMC Target Rate.

"USD-SOFR-COMPOUND" will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{\text{SOFR}_i \times n_i}{360}\right) \cdot 1\right] \times \frac{360}{d}$$

where:

"d<sub>0</sub>", for any Calculation Period, is the number of U.S. Government Securities Business Days in the relevant Calculation Period;

"i" is a series of whole numbers from one to  $d_0$ , each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant Calculation Period; "SOFR" is the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website;

"SOFR<sub>i</sub>", for any day "i" in the relevant Calculation Period, is a reference rate equal to SOFR in respect of that day as published on or about 8:00 a.m., New York City time, on the U.S. Government Securities Business Day immediately following that day "i". If, by 5:00 p.m., New York City time, on the U.S. Government Securities Business Day immediately following any day "i", SOFR in respect of such day "i" has not been published and a USD-SOFR-COMPOUND Index Cessation Event has not occurred, then SOFR<sub>i</sub> for that day "i" will be SOFR as published in respect of the first preceding U.S. Government Securities Business Day for which SOFR was published on the Federal Reserve's Website;

"ni" is the number of calendar days in the relevant Calculation Period on which the rate is SOFRi;

"d" is the number of calendar days in the relevant Calculation Period;

"USD-SOFR-COMPOUND Index Cessation Event" means the occurrence of one or more of the following events:

- (a) a public statement by the Federal Reserve Bank of New York (or a successor administrator of SOFR) announcing that it has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR;
- (b) the publication of information which reasonably confirms that the Federal Reserve Bank of New York (or a successor administrator of SOFR) has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR; or
- (c) a public statement by a regulator or other official sector entity prohibiting the use of SOFR that applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions;

"USD-SOFR-COMPOUND Index Cessation Effective Date" means, in respect of a USD-SOFR-COMPOUND Index Cessation Event, the date on which the Federal Reserve Bank of New York (or a successor administrator of SOFR) ceases to publish SOFR or the date as of which SOFR may no longer be used; and

"OBFR" is the daily Overnight Bank Funding Rate as provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website.

"FOMC Target Rate" is the short-term interest rate target set by the Federal Open Markets Committee and published on the Federal Reserve's Website or, if the Federal Open Markets Committee does not target a single rate, the mid-point of the short-term interest rate target range set by the Federal Open Markets Committee and published on the Federal Reserve's Website (calculated as the arithmetic average of the upper bound of the target range, rounded, if necessary, in accordance with the method set forth in Section 8.1(c))

"Federal Reserve's Website" means the website of the Board of Governors of the Federal Reserve System at http://www.federalreserve.gov, or any Successor Source.

#### Basis Requirements and Defaults (Optional Early Termination and Mandatory Early Termination)

Setting	Requirement	Default
Optional Early Termination:		Inapplicable

Mandatory Early Termination:		Inapplicable
Option Style:	American, Bermuda, European	
Cash Settlement:	Required for Mandatory Early	Applicable (i.e., Transaction is <b>not</b>
	Termination	"torn up for no value")
Optional Early Termination Date:		Cash Settlement Payment Date
Optional Early Termination Date		Following
Business Day Convention:		
Mandatory Early Termination Date		Modified Following
Business Day Convention:		

## Basis Requirements and Defaults (Optional Early Termination—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day:		Banking Day for cash Settlement
		Currency (TARGET Settlement Day
		for EUR)
Latest Exercise Time:	On Expiration Date, the Expiration	Other than Expiration Date, the
	Time	Expiration Time

#### Basis Requirements and Defaults (Cash Settlement)

Setting	Requirement/Choices	Default
Cash Settlement Amount:		
ISDA Cross Currency Settlement Matrix:		Applicable, if cross currency swap with currency pair included in Matrix
ISDA Settlement Matrix:		Applicable, if single currency swap with Currency included in Matrix
Cash Settlement Valuation Time:		
Cash Settlement Valuation Date:		Two Valuation Business Days before Mandatory/Optional Early Termination Date <b>but</b> one Valuation Business Day before Mandatory/Optional Early Termination Date for MXN and same day for CAD, GBP or DKK with Floating Rate Option of "DKK- CIBOR-DKNA13" or "DKK- CIBOR-DKNA13-Bloomberg"
Valuation Business Day:		Banking Days in locations per the Business Day Location Table, plus additional days required by for fixings under the Floating Rate Option(s)
Cash Settlement Payment Date Business Day Convention:		Following
Cash Settlement Method:	Cash Price Cash Price—Alternate Method Collateralized Cash Price	

	Par Yield Curve—Adjusted Par Yield Curve—Unadjusted Zero Coupon Yield—Adjusted	
Cash Settlement Currency:		For single currency, same as Notional Amount, otherwise as specified in ISDA Master Agreement, or otherwise same as Notional Amount for Fixed Amount
Settlement Rate:	ISDA Source/Other Price Source/Reference Banks	
Cash Settlement Reference Banks:		Fallbacks per ISDA 2006 Definitions
Quotation Rate:	bid ask mid Exercising Party Pays (Optional Early Termination Only)	

## **Basis Swaps – CME Cleared**

Summary:	This covers single-currency floating-for-floating
	("basis") swaps cleared by Chicago Mercantile
	Exchange Inc. ("CME").
Limitations on Available Selections and Default	The terms under which a Basis Swap/CME Cleared
Settings:	may be traded are as specified in these terms and
8	conditions and which incorporate the CME Rulebook,
	in particular Chapters 900 and 901 (and any successor
	provisions) and the CME Cleared IRS Product Scope
	(or any successor).
	By electing to trade a Basis Swap/CME Cleared,
	participants are representing that they are familiar
	with the CME Rulebook and the limitations on
	transaction terms contained in it.
Incorporated Standards:	This contract description incorporates by reference the
	CME Rulebook as in effect from time to time.
	The CME Rulebook itself may incorporate certain
	additional standards, such as the 2006 ISDA
	Definitions. Be aware that the timing of effectiveness
	of amendments or supplements to the ISDA
	standards may vary between bilateral and CME
	contracts, since the CME may reserve the right to
	select when and how such changes become effective.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product(s):	Basis
Further Limitations:	Must comply with CME Clearing Requirements.
Terms: Definition Set:	The definition set (a.e. ISDA 2000/ISDA 2006) elected
Demittion Set.	The definition set ( <i>e.g.</i> , ISDA 2000/ISDA2006) elected by, or otherwise binding on, the parties in accordance
	with the CME Rulebook.
Effective Date:	As per the CME Rulebook.
Notional Amount:	An amount in Currency determined by the parties
Tottohal / Milouitt.	subject to limitations in the CME Rulebook.
	This may vary from period to period to the extent
	permitted by the CME Rulebook.
	The CME Rulebook may limit the Currencies and
	Floating Rate Options for which variable notionals are
	permitted.
Currency:	One of the currencies permitted for the relevant
2	transaction type per the CME Rulebook.
Business Days:	As per the CME Rulebook, which may require certain
-	Business Days be applicable on a per Currency or
	Floating Rate Option Basis and may otherwise limit the
	available Business Day locations which can be elected.
Business Day Convention:	As per the CME Rulebook.
Trade Date:	As per the CME Rulebook.
Termination Date:	As agreed by the parties, subject to any minimum or
	maximum tenor in the CME Rulebook.
Termination Date Business Day Convention:	As per the CME Rulebook, and thus subject to

	limitations based on other terms of the transaction.
Stub Periods:	Permitted to the extent allowed under the CME
	Rulebook.
Floating Rate Payer 1 Floating Rate Payer Payment Dates:	As per the CME Rulebook.
Floating Rate Payer 1 Floating Amount:	As per the CME Rulebook.
Floating Rate Payer 1 Floating Rate Option:	As determined by the parties, subject to the CME Rulebook, which may provide a more limited list of available options for a Currency than does the Definition Set.
Floating Rate Payer 1 Designated Maturity:	As per the CME Rulebook, which may provide a more limited set of Designated Maturities than does the related rate source page.
Floating Rate Payer 1 Spread:	Subject to any minimum or maximum rate and per- period variability permitted by the CME Rulebook.
Floating Rate Payer 1 Reset Dates:	As the per CME Rulebook.
Floating Rate Payer 1 Floating Rate Daycount Fraction:	As per the CME Rulebook.
Floating Rate Payer 1 Compounding:	As per the CME Rulebook.
Floating Rate Payer 1 Averaging Method:	As per the CME Rulebook.
Floating Rate Payer 1 Initial Floating Rate:	As per the CME Rulebook.
Floating Rate Payer 2 Floating Rate Payer Payment Dates:	As per the CME Rulebook.
Floating Rate Payer 2 Floating Amount:	As per the CME Rulebook.
Floating Rate Payer 2 Floating Rate Option:	As determined by the parties, subject to the CME Rulebook, which may provide a more limited list of available options for a Currency than does the Definition Set.
Floating Rate Payer 2 Designated Maturity:	As per the CME Rulebook, which may provide a more limited set of Designated Maturities than does the related rate source page.
Floating Rate Payer 2 Spread:	Subject to any minimum or maximum rate and per- period variability permitted by the CME Rulebook.
Floating Rate Payer 2 Reset Dates:	As the per CME Rulebook.
Floating Rate Payer 2 Floating Rate Daycount Fraction:	As per the CME Rulebook.
Floating Rate Payer 2 Compounding:	As per the CME Rulebook.
Floating Rate Payer 2 Averaging Method	As per the CME Rulebook.
Floating Rate Payer 2 Initial Floating Rate	As per the CME Rulebook.
Floating Rate 1 Floating Rate Payer:	As determined by the parties.
Floating Rate 2 Floating Rate Payer	As determined by the parties.
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitation in the CME Rulebook.
Additional Payment/Fees:	As determined by the parties, subject to limitation in the CME Rulebook.
Payment Date for Additional Payment/Fees	As determined by the parties, subject to limitation in the CME Rulebook.

## **Basis Swaps – LCH Cleared**

Summary:	This covers single-currency floating-for-floating
Limitations on Available Selections and Default Settings:	<ul> <li>("basis") cleared by LCH.Clearnet ("LCH").</li> <li>The terms under which a Basis Swap/LCH Cleared may be traded are as specified in these terms and conditions and which incorporate the LCH Rulebook, in particular Schedule 4A (or any successor provisions).</li> </ul>
	By electing to trade a Basis Swap/LCH Cleared, participants are representing that they are familiar with the LCH Rulebook and the limitations on
Incorporated Standards:	transaction terms contained in it.This contract description incorporates by reference the LCH Rulebook as in effect from time to time.The LCH Rulebook itself may incorporate certain additional standards, such as the 2000 ISDA Definitions
	and 2006 ISDA Definitions. Be aware that the timing of effectiveness of amendments or supplements to the ISDA standards may vary between bilateral and LCH contracts, since the LCH may reserve the right to select when and how such changes become effective.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Basis
Further Limitations:	Must comply with LCH Clearing Requirements.
Terms:	
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2000/ISDA2006) elected by, or otherwise binding on, the parties in accordance with the LCH Rulebook.
Notional Amount:	<ul> <li>An amount in Currency determined by the parties subject to limitations in the LCH Rulebook.</li> <li>This may vary from period to period to the extent permitted by the LCH Rulebook.</li> <li>The LCH Rulebook may limit the Currencies and Floating Rate Options for which variable notionals are permitted.</li> </ul>
Currency:	One of the currencies permitted for the relevant transaction type per the LCH Rulebook.
Trade Date:	As per the LCH Rulebook.
Effective Date:	As per the LCH Rulebook.
Termination Date:	As agreed by parties, subject to any minimum or maximum tenor in the LCH Rulebook.
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook.
Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook.
Payment Date for Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook, which may limit the earliest or latest day on which such fees may be paid based on Currency or other factors.
Business Days:	As per the LCH Rulebook, which may require certain

	Business Days be applicable on a per Currency or Floating Rate Option Basis and may otherwise limit the
	available Business Day locations which can be elected.
Business Day Convention:	As per the LCH Rulebook.
Stub Periods:	Permitted to the extent allowed under the LCH Rulebook.
Floating Rate Payer 1:	As determined by the parties.
Floating Rate Payer 1 Payment Dates:	As per the LCH Rulebook.
Floating Rate Payer 1 Compounding Dates:	As per the LCH Rulebook.
Floating Rate Payer 1 Floating Rate Option:	As determined by the parties, subject to LCH Rulebook, which may provide a more limited list of available options for a Currency than does the Definition Set.
Floating Rate Payer 1 Designated Maturity:	As per the LCH Rulebook, which may provide a more limited set of Designated Maturities than does the related rate source page.
Floating Rate Payer 1 Spread:	Subject to any minimum or maximum rate and per- period variability permitted by the LCH Rulebook.
Floating Rate Payer 1 Reset Dates:	As the per LCH Rulebook.
Floating Rate Payer 1 Floating Rate Daycount Fraction:	As per the LCH Rulebook.
Floating Rate Payer 2:	As determined by the parties.
Floating Rate Payer 2 Payment Dates:	As per the LCH Rulebook.
Floating Rate Payer 2 Compounding Dates:	As per the LCH Rulebook.
Floating Rate Payer 2 Floating Rate Option:	As determined by the parties, subject to LCH Rulebook, which may provide a more limited list of available options than are available for a Currency than does the Definition Set.
Floating Rate Payer 2 Designated Maturity:	As per the LCH Rulebook, which may provide a more limited set of Designated Maturities than does the related rate source page.
Floating Rate Payer 2 Spread:	Subject to any minimum or maximum rate and per- period variability permitted by the LCH Rulebook.
Floating Rate Payer 2 Reset Dates:	As the per LCH Rulebook.
Floating Rate Payer 2 Floating Rate Daycount Fraction:	As per the LCH Rulebook.
Negative Interest Rates:	As per the LCH Rulebook, which may require use of a single method.
Withholding and Tax:	As per the LCH Rulebook.
Governing Law:	As per the LCH Rulebook, which may dictate the law applicable to the Transaction.

## BRL CDI Deliverable and Non-Deliverable Interest Rate Swap Contracts and Physically-Settled Swaptions

Summary:	This covers BRL CDI Deliverable and Non-Deliverable
Summary.	Interest Rate Swap Contracts and Physically-Settled
	Swaptions Thereon (the "Contracts").
	Non-Deliverable Contracts are paid in USD, and
	Deliverable Contracts are paid in BRL.
Limitations on Available Selections and Default	The terms under which the Contracts may be traded are
Settings:	as specified in these terms and conditions and in the
-	attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	For Business Days, the defaults shall be the locations
	specified.
	The parties may add additional locations from the Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made. For these
	purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on
	which the parties will transact. These are shown as
	"Default" and will apply unless the parties vary them.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions
	(b) ISDA OTC Taxonomies
	(c) FpML Location Codes (d) the Recommended EMTA-ISDA Market Practice for
	BRL CDI Non-Deliverable Interest Rate Swap
	Transactions (Amended March 13, 2009) ("BRL CDI
	Best Practices")
	(e) the EMTA BRL/USD NDF Template dated May 17,
	2006 (the "NDF Template")
	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Exotic
Further Limitations:	None
Terms:	The data area find by the particular directed in a state
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention
	with any applicable Business Day Convention. The parties may express the unadjusted Effective Date
	as a number of Business Days or Banking Days from the
	Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available

## BRL CDI Deliverable and Non-Deliverable Interest Rate Swap Contracts and Physically-Settled Swaptions

Effective Date Business Day Convention:	As specified by the parties from among the Available
Encouve Date Dusiness Day Convention.	Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Termination
	Date as a number of days, months or years from the
	Effective Date ("relativeTerminationDate").
Termination Date Business Days:	In the case of a Non-Deliverable Contract, USNY and
	the BR Business Day selected by the parties, unless
	there is an Unscheduled Holiday (as defined in the NDF
	Template) following the Trade Date, in which case
	USNY only.
	In the case of a Deliverable Contract, the BR Business
Termination Date Business Day Convention:	Day selected by the parties. Following
Fx Factor:	In the case of a Non-Deliverable Contract, rate
rx ractor.	determined in accordance with the NDF Template,
	treating the Business Day preceding the day of
	calculation of the relevant Fixed Amount or Floating
	Amount as the "Valuation Date" thereunder. (Under the
	NDF Template, this will result in use of the BRL PTAX
	(BRL09) rate in the first instance.)
	In the case of a Deliverable Contract, 1.0.
Fixed Amount:	
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.
Notional Amount ("notionalAmount"):	The Trade Date Present Value Notional Amount
	specified by the parties.
	If the parties do not specify a Notional Amount or a
	Trade Date Present Value Notional Amount but specify
	a Termination Date Future Value Notional Amount, then the Notional Amount will be the Trade Date
	present value of the Termination Date Future Value
	Notional Amount discounted at the Fixed Rate.
Future Value Notional Amount:	An amount in BRL as specified by the parties (or
i uture varue ivotional i miount.	determined based on the Trade Date Present Value
	Notional Amount specified by them), subject to the
	Minimum Notional Amount and Increment specified
	below.
Trade Date Present Value Notional Amount:	An amount in BRL as specified by the parties; such
	amount shall be subject to the Minimum Notional
	Amount and Increment implied by the Future Value
	Notional Amount.
Fixed Rate:	As specified by the parties.
Fixed Amount:	Notwithstanding anything to the contrary contained in
	the 2006 ISDA Definitions, the Fixed Amount shall
	equal: Notional Amount × $(1 + Fixed Rate)^{Calculation Days/252}$
Calculation Days:	As defined in the BRL CDI Best Practices.
Fixed Rate Payment Dates ("unadjustedPaymentDate"):	The Termination Date.
Day Count Fraction:	1/1
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	Same as the Fixed Rate Payer Payment Amount.
Floating Amount:	Notwithstanding anything to the contrary contained in

## BRL CDI Deliverable and Non-Deliverable Interest Rate Swap Contracts and Physically-Settled Swaptions

	the 2006 ISDA Definitions, the Floating Amount shall
	equal:
	Notional Amount × Floating Rate
Payment Dates ("unadjustedPaymentDate"):	The Termination Date.
Floating Rate:	Notwithstanding anything to the contrary contained in the 2006 ISDA Definitions, the Floating Amount shall equal:
$FX Factor \times \prod_{j=1}^{n} (1 + Relevant Rate_j)^{1/252}$	
	Where:
	N=number of Reset Dates in the Calculation Period
	<i>j</i> =a particular Reset Date
	<i>Relevant Rate</i> =the Relevant Rate for instance <i>j</i> of Reset
	Date
Relevant Rate:	CDI-Rate (as defined in the attachment).
Designated Maturity ('indexTenor"):	As specified by the parties from among the available
	tenors.
Spread:	Zero
Day Count Fraction:	1/1
Reset Dates ("resetDate"):	Each Scheduled Reset Date (as defined in the BRL CDI
	Best Practices).
Reset Dates Business Days:	As specified by the parties from among the Available
	BR Business Days.
Floating Rate Payment Dates:	The Termination Date.
Calculation Agent:	As agreed by the parties.
Swaption Terms:	
Option Style:	European
Seller:	As specified by the parties.
Buyer:	As specified by the parties.
Seller's Agent:	As specified by the parties.
Premium:	In the case of a Non-Deliverable Contract, an amount in
	USD specified by the parties.
	In the case of a Deliverable Contract, an amount in
	USD specified by the parties.
Premium Payment Date:	As specified by the parties.
Business Day Convention for Premium Payment Dates:	Following
Business Days for Payments:	In the case of a Non-Deliverable Contract, USNY and
	the BR Business Day selected by the parties, unless
	there is an Unscheduled Holiday (as defined in the NDF
	Template) following the Trade Date, in which case
	USNY only. In the case of a Deliverable Contract, the BR Business
	Day selected by the parties.
Exercise Business Days:	As specified by the parties from among the BR Business
Excretise Dusiness Days.	Days.
Swaption Procedure for Exercise:	
General:	The parties may enter into swaptions with respect to
	which a BRL CDI Swap is the Underlying Swap
	Transaction.
Expiration Date:	As specified by the parties.
Expiration Time:	As specified by the parties.
Partial Exercise:	As specified by the parties.
Minimum Notional Amount:	As specified by the parties and expressed as
	1.2. specified of the parties and expressed as

## BRL CDI Deliverable and Non-Deliverable Interest Rate Swap Contracts and Physically-Settled Swaptions

	Termination Date Future Value Notional Amount.
Maximum Notional Amount:	As specified by the parties and expressed as
	Termination Date Future Value Notional Amount.
Integral Multiple:	As specified by the parties and expressed as
	Termination Date Future Value Notional Amount.
Automatic Exercise:	As specified by the parties.
Threshold:	As specified by the parties if Automatic Exercise is applicable.
Fallback Exercise:	As specified by the parties (if required).
Swaption Settlement Terms:	
Physical Settlement:	Applicable

### BRL CDI Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY
BRL	Brazilian Reai	Any of BR{SP, RJ, BR} and not otherwise declared a financial market holiday by the BM&F

### BRL CDI Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

#### BRL CDI Floating Rate Options

BRL-CDI-CETIP:	For any Reset Date, the Overnight Brazilian Interbank Deposit
	Rate Annualized, known as the average ("Media") of the
	DIOVER- EXTRA Group as published by CETIP (Câmara de
	Custódia e Liquidação) (the "Overnight CDI Rate") for such
	date; provided that (i) such rate is published not later than
	12:00 p.m. on the Brazil Business Day next following such
	Reset Date and (ii) any adjustments made by CETIP to such
	rate at any time later than the end of the business day on such
	Reset Date shall not be taken into account.
	If for any Reset Date there is no published Overnight CDI Rate
	(including as a result of the proviso above), CDI for the
	relevant Reset Date will be the overnight deposit rate published
	for such date by the BM&F in accordance with its rules (see
	http://www.bmf.com.br/portal/pages/boletim1/bd_manual/indic
	a doreFinanceiros1.asp, or any successor page). If the BM&F
	does not publish such a rate for such date, CDI for the relevant
	Reset Date shall be determined jointly by the parties. If the
	parties do not agree on a determination of such rate within one
	Brazil Business Day following the relevant Reset Date, CDI
	shall be determined through a CDI Reference Dealer Poll as
	described herein. If CDI for a Reset Date is not so determined

# BRL CDI Deliverable and Non-Deliverable Interest Rate Swap Contracts and Physically-Settled Swaptions

	by a CDI Reference Dealer Poll, BRL-CDI-Reference Dealers
	shall apply.
DDL CDL Deferrer as Dealersy	
BRL-CDI-Reference Dealers:	If applicable for a Reset Date as set forth above, the Calculation
	Agent shall conduct up to four dealer polls commencing on the
	Brazil Business Day following the relevant Reset Date, in each
	case by requesting each of the CDI Reference Dealers to
	provide a quotation of the CDI. If at least four such quotations
	are obtained from CDI Reference Dealers in any such poll, the
	highest and lowest quotations will be disregarded and CDI for
	the relevant Reset Date will equal the arithmetic mean of the
	remaining quotations. If fewer than four such quotations are
	obtained from a poll, the Calculation Agent shall conduct
	additional such polls until four such quotations are obtained in
	any poll; provided that the Calculation Agent shall not conduct
	more than four polls in the aggregate (with not more than two
	polls on any day and with such polls conducted over not more
	than two Brazil Business Days). If four quotations are not
	obtained from any of such four polls, CDI shall CDI shall not
	be determined by a CDI Reference Dealer Poll.
CDI Reference Dealers:	At least six and not more than eight leading onshore dealers in
	the CDI market selected by the Calculation Agent.

#### BRL CDI Notionals

Currency	Minimum	Increment	Maximum	Default
	(expressed as	(expressed as		
	Termination Date	Termination Date		
	Future Value	Future Value		
	Notional Amount)	Notional Amount)		
BRL (Termination	BRL 5,000,000	BRL 5,000,000	N/A	N/A
Date Future Value				
Notional Amount)				
BRL (Trade Date	As impli	ed by Termination Date	Future Value Notional	Amount
Present Value				
Notional Amount)				
USD	As implied by BRL Termination Date Future Value Notional Amount			

## **Bullion Options**

Summary:	This covers uncleared bullion options ("Bullion
	Options").
Limitations on Available Selections and Default	The terms under which Bullion Options may be traded
Settings:	are shown below and in the attached tables.
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and
	standards:
	2000 ISDA Definitions
	2005 ISDA Commodity Derivatives Definitions
	("Commodity Definitions"), including Sub-Annex B
	thereto.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Commodity
ISDA OTC Base Product:	Metals
ISDA OTC Sub-Product:	Precious
ISDA OTC Transaction type:	Option
ISDA OTC Settlement type:	Cash or Physical
Further Limitations:	None
Terms:	
Trade Date:	As agreed by the parties.
Bullion:	As specified by the parties from among the Available
	Bullion.
Number of Ounces:	As specified by the parties. For any type of Bullion, the
	meaning of "Ounce" will be as specified for that Bullion
	in the list of Available Bullion unless otherwise agreed
	by the parties.
Bullion Option Style:	As specified by the parties from among the Available
	Bullion Option Styles.
Bullion Option Type:	As specified by the parties from among the Available
	Bullion Option Types.
Bullion Option Seller:	As specified by the parties.
Bullion Option Buyer:	As specified by the parties.
Bullion Strike Price:	As specified by the parties as a number of units of the
Bullion Premium:	one of the Available Currencies.As specified by the parties as a number of units of the
Dumon Premum.	one of the Available Currencies.
Bullion Premium Payment Date:	As specified by the parties.
Bullion Premium Payment Date. Bullion Premium Payment Date Business Days	Per the Available Currencies, plus such additional
Dumon Tremum Tayment Date Dusiness Days	Business Days as the parties specify.
Bullion Premium Payment Date Business Day	As specified by the parties from among the Available
Convention:	Business Day Conventions or otherwise per the
	Commodity Definitions.
Bullion Business Day:	Shall have the meaning specified in the Commodity
	Definitions, save that the reference to "New York"
	therein shall be deemed to be a reference to the relevant
	financial center for the Applicable Currency in which
	the Bullion Strike Price is denominated.
Method of Averaging:	For Asian Options, as specified by the parties or
	otherwise per the Commodity Definitions.
Procedure for Exercise:	

	apply if specified by the parties, unless the Bullion Option Transaction is an Allocated Transaction.
	· · · · · · · · · · · · · · · · · · ·
Discharge and Termination:	Section 10.4(c)(iv) of the Commodity Definitions will
Miscellaneous:	
Consequences of Bullion Settlement Disruption Events:	Cancellation and Payment unless the parties agree that Negotiation is applicable.
	below.
Delivery Location:	Per the Delivery Loco specified in the Available Bullion
Provisions Relating to Settlement by Delivery:	
Bullion Transaction Settlement Date:	Commodity Reference Price. As specified by the parties.
Commodity Reference Price:	As specified by the parties from among the Available
Provisions Relating to Cash Settlement:	As specified by the parties from smong the Augilable
Provisions Delating to Cosh Sottlements	Commodity Definitions.
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the
Fallback Reference Price:	None, unless specified by the parties.
-	Commodity Definitions.
Disruption Fallbacks:	Unless otherwise specified by the parties, per the
Additional Market Disruption Events:	As specified by the parties.
	Commodity Definitions.
Market Disruption: Market Disruption Events:	Unless otherwise specified by the parties, per the
Market Dismution.	Section 10.11 of the Commodity Definitions.
Additional Provisions for Tax:	None, unless specified by the parties in accordance with
	Currencies for which it is specified as such.
	Settlement will only be available for Available
	Settlement Types; <i>provided, however</i> , that Cash
Settlement:	As specified by the parties from among the Available
Written Confirmation:	As specified by the parties.
	the parties.
	Commodity Definitions) unless otherwise specified by
	Settlement by Delivery is applicable, the Seller's bid or offer price (as specified in Section 10.4(c)(ii)(B) of the
	Exercise is, or is deemed to be, applicable, and to which
Price Source for Automatic Exercise:	In the case of a Bullion Option for which Automatic
	other amount as specified by the parties.
	10.4(c)(ii)(B)(x) of the Commodity Definitions) or such
	Bullion Strike Price (as specified in Section
	Settlement by Delivery is applicable, one percent of the
	Exercise is, or is deemed to be, applicable, and to which
In-the-Moniness for Automatic Exercise:	In the case of a Bullion Option for which Automatic
Automatic Exercise:	Applicable, unless otherwise specified by the parties.
Seller's Notice Information:	As specified by the Seller.
	Commodity Definitions, unless specified by the parties.
Bullion Settlement Date:	In accordance with Section 10.4(b)(xvii) of the
Zennon Zaphanon Thile.	parties.
Bullion Expiration Time:	For a European Style Bullion Option, as specified by the
Bullion Expiration Date:	As specified by the parties.
Bullion Potential Exercise Dates:	For a Bermuda Style Bullion Option, the days specified by the parties.
	the parties.
	Expiration Date or Potential Exercise Date specified by
	For any other Bullion Option Style, the times on the
	days and the times on such days specified by the parties.
	For an American Style Bullion Option, the period of

Novation Netting:	For Bullion Options subject to Settlement by Delivery and is not an Allocated Transaction, as agreed by the parties on a "Type of Obligation" or "Matched Pair" basis.
Calculation Agent:	As agreed by the parties.

#### Bullion Option Available Currencies and Required Business Days

Three Letter Currency Code	Currency Name (ISDA)	Basic Business Day	Available Settlement
(ISDA/ISO)		Locations For Currency	Туре
		(FpML Codes)	
AUD	Australian Dollar	AUSY	Physical Only
CHF	Swiss Franc	CHZU	Physical Only
EUR	Euro	EUTA	Cash or Physical
GBP	Sterling	GBLO	Cash or Physical
JPY	Japanese Yen	JATO	Physical Only
USD	United States Dollars	USNY	Cash or Physical

#### Bullion Options Available Bullion Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

#### Bullion Option Available Bullion Option Style

ISDA Name
American
European
Bermuda

#### Bullion Option Available Bullion Option Type

ISDA Name
Bullion Put Option
Bullion Call Option
Bermuda

#### Bullion Options Available Bullion

Metal	Ounce	Delivery Loco/Rules
Gold	Fine troy ounce	London/LBMA
Palladium	Troy ounce	Zurich/LPPM or London/LPPM
Platinum	Troy ounce	Zurich/LPPM or London/LPPM
Silver	Troy ounce	London/LBMA

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

ISDA Definition
GOLD-A.M. FIX
GOLD-P.M. FIX
PALLADIUM-A.M. FIX

### **Bullion Options**

PALLADIUM-P.M. FIX
PLATINUM-A.M. FIX
PLATINUM-P.M. FIX
SILVER-FIX

For any Available Currency other than USD and any Bullion Option to which Cash Settlement is applicable, the Commodity Reference Price shall be per Sub-Annex A, save that the reference to U.S. Dollars shall be replaced by a reference to the relevant Available Currency.

## CDS – ABX Indices (Broad Based) Contracts

Summary:	This covers credit default swaps on broad-based ABX indices ("CDS – ABX Indices (Broad Based) Contracts").
Limitations on Available Selections and Default Settings:	<ul> <li>The terms under which CDS – ABX Indices (Broad Based) Contracts may be traded are shown below or in the attached table(s) or the Relevant Annexes promulgated by the index sponsor and referenced below or in the attached table(s), as such Relevant Annexes may be amended from time to time by the Index Sponsor.</li> <li>NO ABX INDEX WILL BE TRADED ON THE SEF ONCE IT HAS CEASED TO BE A BROAD BASED INDEX UNDER CFTC REGULATIONS.</li> </ul>
Incorporated Standards:	<ul> <li>This contract description incorporates by reference the following industry standard documentation and standards:</li> <li>(a) 2003 ISDA Credit Derivatives Definitions, as published by the International Swaps and Derivatives Association, Inc. (the "Credit Derivatives Definitions"), NOT including supplements thereto; and</li> <li>(b) the ABX Transactions Standard Terms Supplement, as published by CDS IndexCo LLC on July 19, 2006 (the "ABX Standard Terms").</li> </ul>
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Credit
ISDA OTC Base Product:	Index
ISDA OTC Sub-Product:	ABX
ISDA OTC Transaction type:	ABX.HE
Further Limitations:	None
Terms:	
Index:	The ABX Index selected by the parties from among the Available ABX Indices. <b>NO ABX INDEX WILL BE TRADED ON THE SEF</b> <b>ONCE IT HAS CEASED TO BE A BROAD BASED</b> <b>INDEX UNDER CFTC REGULATIONS.</b>
Annex Date:	As specified for the applicable Index on the list of Available ABX Indices.
Trade Date:	As agreed by the parties.
Effective Date:	The Trade Date (unless otherwise specified by the parties).
Scheduled Termination Date:	The "Legal Final Maturity Date of the Index" specified in the Relevant Annex.
Floating Rate Payer:	As specified by the parties.
Fixed Rate Payer:	As specified by the parties.
Aggregate Floating Rate Payer Calculation Amount:	An amount is USD specified by the parties.
Fixed Rate:	A number of basis points equal to the "Applicable
	Coupon" as specified for the applicable Index on the Relevant Annex.
Initial Payment Payer:	As selected by the parties.

the contrary contained in the ABX Standard Terms, the
Initial Payment Amount shall be paid by the Initial
Payment Payer on the date that is three Business Days
following the Trade Date, unless otherwise specified by
the parties.

#### Available ABX Indices for CDS - ABX Indices (Broad Based) Contracts

Index	Relevant Annex
ABX.HE.A.06-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.A.06-1.pdf
ABX.HE.AA.06-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AA.06-1.pdf
ABX.HE.AAA.06-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AAA.06-1.pdf
ABX.HE.AA.06-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AA.06-2.pdf
ABX.HE.AAA.06-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AAA.06-2.pdf
ABX.HE.AAA.07-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AAA.07-1.pdf
ABX.HE.AAA.07-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.AAA.07-2.pdf
ABX.HE.PENAAA.06-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.PENAAA.06-2.pdf
ABX.HE.PENAAA.07-1	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.PENAAA.07-1.pdf
ABX.HE.PENAAA.07-2	http://www.markit.com/assets/en/docs/products/data/indices/credit-index- annexes/ABX.HE.PENAAA.07-2.pdf

## NO ABX INDEX WILL BE TRADED ON THE SEF ONCE IT HAS CEASED TO BE A BROAD BASED INDEX UNDER CFTC REGULATIONS.

## CDS Index Contract – Emerging Markets Swaps and Swaptions

Summary:	This covers "CDS Index Contract – Emerging Markets
	Swaps and Swaptions" contracts $-i.e.$ , an agreement to
	buy or sell protection on a broad-based basket of
	emerging markets sovereign entities.
Index:	CDX.EM: Series 12 through current, so long as such
	Index is not a narrow-based Index.
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a
-	premium to the seller in case of a credit event
	occurring. Credit events include Bankruptcy and Failure
	to Pay.
	Sell = Sell Protection, the seller of protection receives
	the premium payments from the protection buyer. The
	Seller owns the credit risk of the instrument.
	Investment Grade indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of
	500 bps and exchanged on a quarterly basis.
Swap Tenor:	As agreed by the parties, subject to Applicable Law.
Effective Date:	The date on which parties begin calculating accrued
	obligations such as fixed payments. Also known as the
	start date of the swap.
Maturity Date:	The final date on which the obligations no longer
T 1- T	accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent payment - Payments related to credit event
	settlement will be determined pursuant to the 2009
	ISDA Credit Derivatives Determination Committees
	and Auction Settlement Supplement ( <i>i.e.</i> , the Big Bang
	and Little Bang Protocols).
	Fixed Quarterly cash payments - reflected in basis
	points and paid by the protection buyer to the protection
	seller.
	Upfront payment - The upfront payment is a portion of
	the payments, expressed in percentage points of the
	notional, which is present valued and paid immediately to the seller.
Swaptions on the Above:	
Swaptions:	The SEF is also listing Physically-Settled Swaptions on
1	the Index on the terms described herein.
Swaption Option Style:	European; the Swaptions may be exercised only on
1 - I	expiration.
Swaption Tenor:	The tenor of the Swaptions will be selected by the
1	parties and will be no shorter than three months and no
	longer than three months less than the Swap Tenor.

Settlement:	The Swaption will be Physically Settled and, if
	exercised, will result in the parties entering into a swap
	on the Index on the terms described herein.
ISDA Definitions (2003 v. 2014 Credit Derivatives	
Definitions):	
2003 Definitions:	ISDA has published 2014 Credit Derivatives
	Definitions, which alter the treatment accorded certain
	events, particularly as relates to sovereigns and
	financials and certain "orphan" CDS (Reference
	Entities with no deliverable obligations).
Index Sponsor:	Markit, which sponsors the Index, has published
	information on treatment of both legacy and future
	indices.
	The parties should consult Markit's documentation to
	determine the exact treatment. It is the SEF's
	understanding that, in general, all CDS index trades
	will convert to the 2014 Definitions, with individual
	components being excluded if they would be impacted
	by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the
	Definitions required by the relevant DCO selected by
	the parties.
	The parties should consult the relevant DCO's
	documentation to determine the exact treatment. It is
	the SEFs understanding that the DCOs will be
	converting all trades to the 2014 definitions, with
	individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of
	their Confirmation process. However, this may limit
	clearability and result in creation of a bespoke Index
	transaction.

## CDS Index Contract – European Crossover 5Y Swaps and Swaptions

<u>C</u>	
Summary:	This covers "CDS Index Contract – European Crossover
	5Y Swaps and Swaptions". The European Crossover
	index comprises 50 equally weighted credit default
	swaps on the most liquid sub-investment grade
• •	European corporate entities.
Index:	ITRAXX.EUROPE CROSSOVER: Series 10 to current.
Currency:	EUR
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a
	premium to the seller in case of a credit event
	occurring.
	Sell = Sell Protection, the seller of protection receives
	the premium payments from the protection buyer. The
	Seller owns the credit risk of the instrument.
Swap Conventions:	European crossover indices are traded on spread.
	Fixed coupon payments are calculated at a spread of
	500 bps and exchanged on a quarterly basis.
Swap Tenor:	5Y
Effective Date:	The date on which parties begin calculating accrued
	obligations such as fixed payments. Also known as the
	start date of the swap.
Maturity Date:	The final date on which the obligations no longer
	accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on the tpSEF
	Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent payment - Payments related to credit event
	settlement will be determined pursuant to the 2009
	ISDA Credit Derivatives Determination Committees
	and Auction Settlement Supplement, (i.e., the Big Bang
	Protocol).
	Fixed Quarterly cash payments - reflected in basis
	points and paid by the protection buyer to the protection
	seller.
	Upfront fee payment - The upfront fee is a portion of the
	payments, expressed in percentage points of the
	notional, which is present valued and paid immediately
	to the seller.
Swaptions on the Above:	
Swaptions:	The SEF is also listing Physically-Settled Swaptions on
	the Index on the terms described herein.
Swaption Option Style:	European; the Swaptions may be exercised only on
	expiration.
Swaption Tenor:	The tenor of the Swaptions will be selected by the
	parties and will be no shorter than three months and no
	longer than three months less than the Swap Tenor.
Settlement:	The Swaption will be Physically Settled and, if
	exercised, will result in the parties entering into a swap

	on the Index on the terms described herein.
ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions):	
2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).
Index Sponsor:	Markit, which sponsors the Index, has published information on treatment of both legacy and future indices. The parties should consult Markit's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the Definitions required by the relevant DCO selected by the parties. The parties should consult the relevant DCO's documentation to determine the exact treatment. It is the SEFs understanding that the DCOs will be converting all trades to the 2014 definitions, with individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.

## CDS Index Contract – European HiVol 5Y Swaps and Swaptions

S	
Summary:	This covers "CDS Index Contract – European HiVol 5Y
	Swaps and Swaptions" $-i.e.$ , an agreement to buy or
	sell protection on a basket comprised of 30 equally
	weighted credit default swaps on the widest spread non-
	financial European corporate entities.
Index:	ITRAXX.EUROPE HIVOL: Series 10 to current.
Currency:	EUR
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a
	premium to the seller in case of a credit event
	occurring.
	Sell = Sell Protection, the seller of protection receives
	the premium payments from the protection buyer. The
	Seller owns the credit risk of the instrument.
Swap Conventions:	European crossover indices are traded on spread.
	Fixed coupon payments are calculated at a spread of
	100 bps and exchanged on a quarterly basis.
Swap Tenor:	5Y
Effective Date:	The date on which parties begin calculating accrued
	obligations such as fixed payments. Also known as the
	start date of the swap.
Maturity Date:	The final date on which the obligations no longer
	accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on the tpSEF
	Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent payment - Payments related to credit event
	settlement will be determined pursuant to the 2009
	ISDA Credit Derivatives Determination Committees
	and Auction Settlement Supplement, (i.e., the Big Bang
	Protocol).
	Fixed Quarterly cash payments - reflected in basis
	points and paid by the protection buyer to the protection
	seller.
	Upfront fee payment - The upfront fee is a portion of the
	payments, expressed in percentage points of the
	notional, which is present valued and paid immediately
~	to the seller.
Swaptions on the Above:	
Swaptions:	The SEF is also listing Physically-Settled Swaptions on
	the Index on the terms described herein.
Swaption Option Style:	European; the Swaptions may be exercised only on
	expiration.
Swaption Tenor:	The tenor of the Swaptions will be selected by the
	parties and will be no shorter than three months and no
	longer than three months less than the Swap Tenor.
Settlement:	The Swaption will be Physically Settled and, if
	exercised, will result in the parties entering into a swap

	on the Index on the terms described herein.
ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions):	
2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).
Index Sponsor:	Markit, which sponsors the Index, has published information on treatment of both legacy and future indices. The parties should consult Markit's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the Definitions required by the relevant DCO selected by the parties. The parties should consult the relevant DCO's documentation to determine the exact treatment. It is the SEFs understanding that the DCOs will be converting all trades to the 2014 definitions, with individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.

## CDS Index Contract – European IG 5Y Swaps and Swaptions

Summary	This covers "CDS Index Contract European IC 5V
Summary:	This covers "CDS Index Contract – European IG 5Y Swaps and Swaptions" – <i>i.e.</i> , an agreement to buy or
	sell protection on a basket of liquid European based
	entities with an investment grade credit rating.
Index:	ITRAXX.EUROPE: Series 10 to current.
Currency:	EUR
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a
Trading Conventions:	premium to the seller in case of a credit event
	occurring.
	Sell = Sell Protection, the seller of protection receives
	the premium payments from the protection buyer. The
	Seller owns the credit risk of the instrument.
Swap Conventions:	European IG indices are traded on spread.
	Fixed coupon payments are calculated at a spread of
	100 bps and exchanged on a quarterly basis.
Swap Tenor:	5Y
Effective Date:	The date on which parties begin calculating accrued
	obligations such as fixed payments. Also known as the
	start date of the swap.
Maturity Date:	The final date on which the obligations no longer
•	accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on the tpSEF
	Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent payment - Payments related to credit event
	settlement will be determined pursuant to the 2009
	ISDA Credit Derivatives Determination Committees
	and Auction Settlement Supplement, ( <i>i.e.</i> , the Big Bang
	Protocol).
	Fixed Quarterly cash payments - reflected in basis points and paid by the protection buyer to the protection
	seller.
	Upfront fee payment - The upfront fee is a portion of the
	payments, expressed in percentage points of the
	notional, which is present valued and paid immediately
	to the seller.
Swaptions on the Above:	
Swaptions:	The SEF is also listing Physically-Settled Swaptions on
	the Index on the terms described herein.
Swaption Option Style:	European; the Swaptions may be exercised only on
T	expiration.
Swaption Tenor:	The tenor of the Swaptions will be selected by the
	parties and will be no shorter than three months and no
	longer than three months less than the Swap Tenor.
Settlement:	The Swaption will be Physically Settled and, if
	exercised, will result in the parties entering into a swap
	on the Index on the terms described herein.

ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions):	
2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).
Index Sponsor:	Markit, which sponsors the Index, has published information on treatment of both legacy and future indices. The parties should consult Markit's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the Definitions required by the relevant DCO selected by the parties. The parties should consult the relevant DCO's documentation to determine the exact treatment. It is the SEFs understanding that the DCOs will be converting all trades to the 2014 definitions, with individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.

## **CDS Index Contract – European IG 10Y Swaps and Swaptions**

Summary:	This covers "CDS Index Contract – European IG 10Y
Summary.	Swaps and Swaptions" $-i.e.$ , an agreement to buy or
	sell protection on a basket of liquid European based
	entities with an investment grade credit rating.
Index:	ITRAXX.EUROPE: Series 7 to current.
Currency:	EUR
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a
Traung Conventions.	premium to the seller in case of a credit event
	occurring.
	Sell = Sell Protection, the seller of protection receives
	the premium payments from the protection buyer. The
	Seller owns the credit risk of the instrument.
Swap Conventions:	European IG indices are traded on spread.
Swap conventions.	Fixed coupon payments are calculated at a spread of
	100 bps and exchanged on a quarterly basis.
Swap Tenor:	10Y
Effective Date:	The date on which parties begin calculating accrued
	obligations such as fixed payments. Also known as the
	start date of the swap.
Maturity Date:	The final date on which the obligations no longer
	accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on the tpSEF
	Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent payment - Payments related to credit event
	settlement will be determined pursuant to the 2009
	ISDA Credit Derivatives Determination Committees
	and Auction Settlement Supplement, (i.e., the Big Bang
	Protocol).
	Fixed Quarterly cash payments - reflected in basis
	points and paid by the protection buyer to the protection
	seller.
	Upfront fee payment - The upfront fee is a portion of the
	payments, expressed in percentage points of the
	notional, which is present valued and paid immediately
	to the seller.
Swaptions on the Above:	
Swaptions:	The SEF is also listing Physically-Settled Swaptions
	on the Index on the terms described herein.
Swaption Option Style:	European; the Swaptions may be exercised only on
	expiration.
Swaption Tenor:	The tenor of the Swaptions will be selected by the
	parties and will be no shorter than three months and
	no longer than three months less than the Swap Tenor.

Settlement:	The Swaption will be Physically Settled and, if
	exercised, will result in the parties entering into a
	swap on the Index on the terms described herein.
ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions):	
2003 Definitions:	ISDA has published 2014 Credit Derivatives
	Definitions, which alter the treatment accorded certain
	events, particularly as relates to sovereigns and
	financials and certain "orphan" CDS (Reference
	Entities with no deliverable obligations).
Index Sponsor:	Markit, which sponsors the Index, has published
	information on treatment of both legacy and future
	indices.
	The parties should consult Markit's documentation to
	determine the exact treatment. It is the SEF's
	understanding that, in general, all CDS index trades
	will convert to the 2014 Definitions, with individual
	components being excluded if they would be impacted
	by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the
	Definitions required by the relevant DCO selected by
	the parties.
	The parties should consult the relevant DCO's
	documentation to determine the exact treatment. It is
	the SEFs understanding that the DCOs will be
	converting all trades to the 2014 definitions, with
	individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part
	of their Confirmation process. However, this may limit
	clearability and result in creation of a bespoke Index
	transaction.

## CDS Index Contract – North America Investment Grade and High Yield Swaps and Swaptions

Contract Overview:	An agreement to buy or sell protection on a basket of liquid North America based entities with a high yield credit rating (CDX.NA.HY, CDX.NA.HY.B and CDX.NA.HY.BB) or an investment grade credit rating (CDX.NA.IG).
Index:	CDX.NA.HY: Series 8 to current.
	CDX.NA.HY.B: Series 8 to current.
	CDX.NA.HY.BB: Series 8 to current.
	CDX.NA.IG: Series 8 to current.
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a premium to the seller in case of a credit event occurring. Credit events include Bankruptcy, Failure to Pay and Restructuring.
	Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer. The Seller owns the credit risk of the instrument.
	High Yield indices such as the CDX.NA.HY are traded on price.
	Investment Grade indices such as the CDX.NA.IG are traded on spread.
Swap Conventions:	For CDX.NA.HY, CDX.NA.HY.B and CDX.NA.HY.BB, fixed coupon payments are calculated at a spread of 500 bps and exchanged on a quarterly basis.
	For CDX.NA.IG, fixed coupon payments are calculated at a spread of 100 bps and exchanged on a quarterly basis.
Swap Tenor:	3Y, 5Y, 7Y and 10Y or as otherwise agreed by the parties.
Tranching:	Transactions may have only one tranche, where all losses are allocated to the protection seller, starting with the first dollar of loss and ending only when the entire notional of the transaction has been exhausted or the Transaction itself expires.
	Transactions may also be tranched in a way in which losses are allocated to the protection seller only after a certain amount of losses have occurred on the Index (the "attachment point") and cease being allocated to the protection seller after a certain additional amount of losses have occurred on the Index (the "detachment

### **Terms and Conditions**

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CDS Index Contract - North America Investment	Grade and High	Yield Swaps and Swaptions
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	point"). In the case of tranched tr	ansactions in the	
	CDX.NA.HY, CDX.NA. tranches include:	CDX.NA.HY, CDX.NA.HY.B or CDX.NA.HY.BB, the tranches include:	
	Attachment Point	Detachment Point	
	0	10%	
	0	15%	
	10%	15%	
	15%	25%	
	25%	35%	
	35%	100%	
	In the case of tranched to the tranches include:	ransactions in the CDX.NA.IG,	
	Attachment Point	Detachment Point	
	0	3%	
	3%	7%	
	7%	10%	
	7%	15%	
	10%	15%	
	15%	30%	
	15%	100%	
		ary tranches enumerated gree to custom attachment and	
Effective Date:		The date on which parties begin calculating accrued obligations such as fixed payments. Also known as the start date of the swap.	
Maturity Date:		The final date on which the obligations no longer accrue and the final payment occurs.	
Trade Types:	The following swap type	s may be executed on the SEF:	
	Outrights		
	Roll Trades		
	Curve Trades		
Settlement:		yments related to credit event nined pursuant to the relevant slow).	
		ments - reflected in basis rotection buyer to the protection	
	Upfront fee payment - The payments, expressed in payments, expressed	ne upfront fee is a portion of the bercentage points of the	

	notional, which is present valued and paid immediately to the seller.
Swaptions on the Above	
Swaptions:	The SEF is also listing Physically-Settled Swaptions on each of the CDX.NA.HY, CDX.NA.HY.B, CDX.NA.HY.BB and CDX.NA.IG on the terms described herein.
Swaption Option Style:	European; the Swaptions may be exercised only on expiration.
Swaption Tenor:	The tenor of the Swaptions will be selected by the parties and will be no shorter than three months and no longer than three months less than the Swap Tenor.
Settlement:	The Swaption will be Physically Settled and, if exercised, will result in the parties entering into a swap on the Index on the terms described herein.
Tranching:	Swaptions may be written on tranched or untranched transactions.
ISDA Definitions (2003 v. 2014 Credit Derivatives Definitions)	
2014/2003 Definitions:	ISDA has published 2014 Credit Derivatives Definitions, which alter the treatment accorded certain events, particularly as relates to sovereigns and financials and certain "orphan" CDS (Reference Entities with no deliverable obligations).
Index Sponsor:	IHS Markit Ltd, which sponsors the Index, has published information on treatment of both legacy and future indices.
	The parties should consult IHS Markit Ltd's documentation to determine the exact treatment. It is the SEF's understanding that, in general, all CDS index trades will convert to the 2014 Definitions, with individual components being excluded if they would be impacted by the differences between the two.
Cleared Transactions:	Transactions intended to be cleared will use the Definitions required by the relevant DCO selected by the parties.
	The parties should consult the relevant DCO's documentation to determine the exact treatment. It is the SEFs understanding that the DCOs will be converting all trades to the 2014 definitions, with individual component excluded as describe above.
Choice of Definitions:	The parties can elect which Definitions to use as part of their Confirmation process. However, this may limit clearability and result in creation of a bespoke Index transaction.

## CDS Index Contracts – CMBX

### **Terms and Conditions**

Summary:	This covers uncleared credit default swaps on IHS Markit Ltd's "CMBX Indices" ("CDS Index Contracts – CMBX"). The terms under which CDS Index Contracts – CMBX may be traded are shown below.
Contract Overview:	An agreement to buy or sell protection on one of the IHS Markit Ltd CMBX Indices listed under the heading "Index" immediately below. Each such index is composed of twenty-five (25) equally-weighted reference obligations that are tranches of commercial mortgage-backed securities offerings that meet the relevant eligibility criteria published by IHS Markit Ltd from time to time.
Index:	CMBX.NA.AAA: Series 6 to current.
	CMBX.NA.AS: Series 6 to current.
	CMBX.NA.AA: Series 6 to current.
	CMBX.NA.A: Series 6 to current.
	CMBX.NA.BBB-: Series 6 to current.
	CMBX.NA.BB: Series 6 to current.
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a premium to the seller and receives a payment from the seller of protection in the case of a credit event occurring.
	Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer and makes a payment to the buyer of protection in the case of a credit event occurring. The Seller owns the credit risk of the instrument.
	The indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at the applicable spread specified below:
	• CMBX.NA.AAA: 50 bps
	• CMBX.NA.AS: 100 bps
	• CMBX.NA.AA: 150 bps
	• CMBX.NA.A: 200 bps
	• CMBX.NA.BBB-: 300 bps
	• CMBX.NA.BB: 500 bps
	Fixed coupon payments are exchanged on a monthly basis.

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Swap Tenor:	As agreed by counterparties, subject to applicable law.
Effective Date:	The date (to be agreed by the counterparties) on which parties begin calculating accrued obligations such as fixed payments. Also known as the start date of the swap.
Maturity Date:	The final date (to be agreed by the counterparties) on which the obligations no longer accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF Inc.:
	Outrights
	Roll Trades
Settlement:	<u>Contingent Payment</u> : Payments related to credit event settlement will be determined pursuant to the 2014 ISDA Credit Derivatives Definitions as published by the International Swaps and Derivatives Association, Inc. Such payments are paid by the protection seller to the protection buyer.
	<u>Fixed Monthly Cash Payments</u> : Reflected in basis points and paid by the protection buyer to the protection seller.
	<u>Upfront Fee Payment</u> : The upfront fee is a portion of the payments, expressed in percentage points of the notional, which is present valued and paid at the inception of the Contract by the protection buyer to the protection seller.

## <u>CDS Index Contracts – iTraxx Australia</u>

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Summary:	This covers uncleared credit default swaps on IHS Markit Ltd's "iTraxx <sup>®</sup> Australia Index" ("CDS Index
	Contracts – iTraxx Australia"). The terms under which
	CDS Index Contracts – iTraxx Australia may be traded
	are shown below.
Contract Overview:	An agreement to buy or sell protection on an index
	composed of twenty five (25) liquid Australian entities
	with investment grade credit ratings that trade in the
	CDS market or have significant domestic bond issuance
	as published by IHS Markit Ltd. from time to time.
Index:	iTraxx <sup>®</sup> Australia Index: Series 30 to current.
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a
	premium to the seller in case of a credit event occurring.
	Sell = Sell Protection, the seller of protection receives
	the premium payments from the protection buyer. The
	Seller owns the credit risk of the instrument.
	The indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of 100
Swap Conventions.	bps and exchanged on a quarterly basis.
Swap Tenor:	As agreed by counterparties, subject to Applicable Law.
Effective Date:	The date (to be agreed by the counterparties) on which
	parties begin calculating accrued obligations such as
	fixed payments. Also known as the start date of the
	swap.
Maturity Date:	The final date (to be agreed by the counterparties) on
	which the obligations no longer accrue and the final
	payment occurs.
Trade Types:	The following swap types may be executed on tpSEF
Trade Types.	Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent Payment: Payments related to credit event
	settlement will be determined pursuant to the 2014
	ISDA Credit Derivatives Definitions as published by the
	International Swaps and Derivatives Association, Inc.
	Fixed Quarterly Cash Payments: Reflected in basis
	points and paid by the protection buyer to the protection
	seller.
	<u>Upfront Fee Payment</u> : The upfront fee is a portion of
	the payments, expressed in percentage points of the
	notional, which is present valued and paid at the

	inception of the Contract by the protection buyer to the protection seller.
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# CDS Index Contracts – iTraxx Japan

## **Terms and Conditions**

Summary:	This covers uncleared credit default swaps on IHS Markit Ltd's "Markit iTraxx <sup>®</sup> Japan Index" ("CDS Index Contracts – iTraxx Japan"). The terms under which CDS Index Contracts – iTraxx Japan may be traded are shown below.
Contract Overview:	An agreement to buy or sell protection on an index composed of forty (40) Japanese entities with investment grade credit ratings that trade in the CDS market as published by IHS Markit Ltd. from time to time.
Index:	Markit iTraxx <sup>®</sup> Japan Index: Series 30 to current.
Currency:	JPY
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a premium to the seller in case of a credit event occurring.
	Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer. The Seller owns the credit risk of the instrument.
	The indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of 100 bps and exchanged on a quarterly basis.
Swap Tenor:	As agreed by counterparties, subject to Applicable Law.
Effective Date:	The date (to be agreed by the counterparties) on which parties begin calculating accrued obligations such as fixed payments. Also known as the start date of the swap.
Maturity Date:	The final date (to be agreed by the counterparties) on which the obligations no longer accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent Payment: Payments related to credit event settlement will be determined pursuant to the 2014 ISDA Credit Derivatives Definitions as published by the International Swaps and Derivatives Association, Inc.
	<u>Fixed Quarterly Cash Payments</u> : Reflected in basis points and paid by the protection buyer to the protection seller.
	<u>Upfront Fee Payment</u> : The upfront fee is a portion of the payments, expressed in percentage points of the notional, which is present valued and paid at the

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inception of the Contract by the protection buyer to the protection seller.

## CDS Index Contracts – ITRXAEJ.IG (iTraxx® Asia ex-Japan Investment Grade)

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Summary:	This covers "CDS Index Contracts – ITRXAEJ.IG
	(iTraxx® Asia ex-Japan Investment Grade)" $-i.e.$ , an
	agreement to buy or sell protection on a broad-based
	basket of investment grade Asian corporate and
	sovereign/agency issuers (excluding Japanese issuers).
Index:	ITRXAEJ.IG (iTraxx® Asia ex-Japan Investment
	Grade): Series 14 through current, so long as such
~	Index is not a narrow-based Index.
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a
	premium to the seller in case of a credit event
	occurring. Credit events include Bankruptcy and Failure
	to Pay.
	Sell = Sell Protection, the seller of protection receives
	the premium payments from the protection buyer. The
	Seller owns the credit risk of the instrument.
	Investment Grade indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of
	100 bps and exchanged on a quarterly basis.
Swap Tenor:	As agreed by the parties, subject to Applicable Law.
Effective Date:	The date on which parties begin calculating accrued
	obligations such as fixed payments. Also known as the
	start date of the swap.
Maturity Date:	The final date on which the obligations no longer
	accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF
	Inc.:
	Outrights
	Roll Trades
	Curve Trades
Settlement:	Contingent payment - Payments related to credit event
	settlement will be determined pursuant to the 2003
	ISDA Credit Derivatives Definitions, as modified by the
	2009 ISDA Credit Derivatives Determination
	Committees and Auction Settlement Supplement ( <i>i.e.</i> ,
	the Big Bang and Little Bang Protocols) and the ISDA
	2014 Credit Derivatives Protocol (for Series 21 and
	prior) and the ISDA 2014 Definitions (for Series 22 and
	later).
	Fixed Quarterly cash payments - reflected in basis
	points and paid by the protection buyer to the protection
	seller.
	Upfront payment - The upfront payment is a portion of
	the payments, expressed in percentage points of the
	notional, which is present valued and paid immediately
	to the seller.

## CDS Index Contracts – MCDX Index

Summary:	This covers uncleared credit default swaps on IHS Markit Ltd's MCDX Index ("CDS Index Contracts – MCDX Index"). The terms under which CDS Index Contracts – MCDX Index may be traded are shown below.
Contract Overview:	Until October 2018, an agreement to buy or sell protection on a broad-based index composed of fifty (50) municipal credits.
	Beginning with MCDX.NA Series 31 in October 2018, an agreement to buy or sell protection on a broad-based index composed of twenty (20) municipal credits.
Index:	MCDX: all series
Currency:	USD
Quoting Convention and Minimum Increment:	As agreed by counterparties.
Minimum Size:	As agreed by counterparties.
Trading Conventions:	Buy = Buy Protection, the buyer of protection pays a premium to the seller in case of a credit event occurring. Credit events include "Bankruptcy" and "Failure to Pay."
	Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer. The Seller owns the credit risk of the instrument.
	MCDX indices are traded on spread.
Swap Conventions:	Fixed coupon payments are calculated at a spread of 100 bps coupon and exchanged on a quarterly basis at 75% recovery.
Swap Tenor:	3 years, 5 years, 10 years
Effective Date:	The date (to be agreed by the counterparties) on which parties begin calculating accrued obligations such as fixed payments. Also known as the start date of the swap.
Maturity Date:	The final date (to be agreed by the counterparties) on which the obligations no longer accrue and the final payment occurs.
Trade Types:	The following swap types may be executed on tpSEF Inc.: • Outrights • Roll Trades
	Curve Trades

Settlement:	<u>Contingent Payment</u> : Payments related to credit event settlement will be determined pursuant to the 2003 ISDA Credit Derivatives Definitions, as modified by the 2009 ISDA Credit Derivatives Determinations Committees and Auction Settlement Supplement thereto. <u>Fixed Quarterly Cash Payments</u> : Reflected in basis points and paid by the protection buyer to the protection seller.
	<u>Upfront Fee Payment</u> : The upfront fee is a portion of the payments, expressed in percentage points of the notional, which is present valued and paid immediately to the seller.

## **Commodity Index Swaps**

## **Terms and Conditions**

Summary:	This covers commodity index swaps (each, a "Commodity Index Swap").
Limitations on Available Selections and Default	The terms under which a Commodity Index Swap may
Settings:	be traded are shown below and in the attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than
	the date cannot be earlier than Earliest nor later than Latest.
	<del>Latest.</del>
	In many cases there are normal "vanilla" terms on
	which the parties will transact. These are shown as
	"Default" and will apply unless the parties vary them.
Incorporated Standards:	This contract description incorporates by reference the
L	following industry standard documentation and
	standards:
	2005 ISDA Commodity Derivatives Definitions
	("Commodity Definitions")
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Commodity
ISDA OTC Base Product:	Index
ISDA OTC Transaction type:	Swap
ISDA OTC Settlement type:	Cash
Further Limitations:	None
Terms:	
Trade Date:	As agreed by the parties.
Effective <u>Trade</u> Date:	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention on which
	the contract is entered into.
Effective Date Business Days:	None, unless As specified by the parties.
Effective Date Business Day Convention:	None, unless specified by the parties from among the
	Available Business Day Conventions.
Termination Date:	As specified by the parties.
Termination Date Business Days:	None, unless specified by the parties.
Termination Date Business Day Convention:	None, unless specified by the parties from among the
	Available Business Day Conventions.
Commodity:	As <u>The index</u> specified by the parties from among the
	Available indices listed in the table below titled
Total National Quantity	<u>"Commodity Index Swap Available</u> Indices." The sum of the Notional Quantities per Calculation
Total Notional Quantity:	Period.
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period
nononal Quantity per Calculation Feriod.	Basis.
Calculation Periods:	As specified by the parties.
Calculation Period Business Days:	None, unless specified by the parties.
Calculation Period Business Days.	As specified by the parties from among the Available
Curculation remote Dasmess Day Convention.	Business Day Conventions.
	Dusmess Day Conventions.

Payment Dates:	In relation to each Calculation Period, as specified by the parties, each such day being subject to adjustment in accordance with the Payment Date Business Day Convention.
Payment Date Business Days:	The Business Days specified for the relevant Commodity, plus any additional Business Days specified by the parties from among the Available Business Days.
Payment Date-Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Fixed Amount:	
Fixed Price Payer:	As specified by the parties.
Fixed Price or Fixed Amount:	As specified by the parties, expressed as a rate or overall.
Floating Amount:	
Floating Price Payer:	As specified by the parties.
Floating Price:	In relation to each Calculation Period, the level of the specified Available Commodity Index at the end of the such Calculation Period less the level of the specified Available Commodity Index at the start of the such Calculation Period, the result of which is divided by the level of the specified Available Commodity Index at the start of the such Calculation Period.
Market Disruption:	
Market Disruption Events:	Unless otherwise specified by the parties, per the Commodity Definitions.
Additional Market Disruption Events:	As specified by the parties.
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the Commodity Definitions.
Disruption Fallbacks:	Unless otherwise specified by the parties, per the Commodity Definitions.
Fallback Reference Price:	None, unless specified by the parties.
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the Commodity Definitions.
Minimum and Incremental Price:	The minimum price is \$10,000,000 and the minimum incremental price is \$1,000,000.
Calculation Agent:	As agreed by the parties.

Commodity Index Swap Available Currencies and Required Business Days

Three Letter Currency Code	Currency Name (ISDA)	Basic Business Day Locations
(ISDA/ISO)		For Currency (FpML Codes)
USD	United States Dollars	<del>USNY</del>
EUR	Euro	EUTA
GBP	Sterling	GBLO

Commodity Index Swap Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

Abbr	Name			
BCOM	BCOM ER			
BCOMF1	BCOM F1 ER			
BCOMF2	BCOM F2 ER			
BCOMF3	BCOM F3 ER			
BCOMF4	BCOM F4 ER			
BCOMF5	BCOM F5 ER			
BCOMF6	BCOM F6 ER			
BCOMAG	BCOM Agriculture ER			
BCOMEN	BCOM Energy ER			
BCOMGR	BCOM Grains ER			
BCOMIN	BCOM Industrial Metals ER			
BCOMLI	BCOM Livestock ER			
BCOMPE	BCOM Petroleum ER			
BCOMPR	BCOM Precious Metals ER			
BCOMSO	BCOM Softs ER			
BCOMXAG	BCOM ex-Agriculture ER			
BCOMXAL	BCOM ex-Agriculture and Livestock ER			
BCOMXE	BCOM ex-Energy ER			
BCOMXGR	BCOM ex-Grains ER			
BCOMXIM	BCOM ex-Industrial Metals ER			
BCOMXLI	BCOM ex-Livestock ER			
BCOMXPE	BCOM ex-Petroleum ER			
BCOMXPM	BCOM ex-Precious Metals ER			
BCOMXSO	BCOM ex-Softs ER			
BCOMAL	BCOM Aluminum ER			
BCOMCO	BCOM Brent Crude ER			
BCOMCC	BCOM Cocoa ER			
BCOMKC	BCOM Coffee ER			
BCOMHG	BCOM Copper ER			
BCOMCN	BCOM Corn ER			
BCOMCT	BCOM Cotton ER			
BCOMFC	BCOM Feeder Cattle ER			
BCOMGO	BCOM Gas Oil ER			
BCOMGC	BCOM Gold ER			
ВСОМНО	BCOM Heating Oil ER			
BCOMPB	BCOM Lead ER			
BCOMLH	BCOM Lean Hogs ER			
BCOMLC	BCOM Live Cattle ER			
BCOMNG	BCOM Natural Gas ER			
BCOMNI	BCOM Nickel ER			

### Commodity Index Swap Available Commodity Indices

Abbr	Name			
ВСОМОЈ	BCOM Orange Juice ER			
BCOMPA	BCOM Palladium ER			
BCOMPL	BCOM Platinum ER			
BCOMSI	BCOM Silver ER			
BCOMSM	BCOM Soybean Meal ER			
BCOMSM1	Bloomberg Soybean Meal Subindex 1 Month Forward			
ВСОМВО	BCOM Soybean Oil ER			
BCOMSY	BCOM Soybeans ER			
BCOMSB	BCOM Sugar ER			
BCOMSN	BCOM Tin ER			
BCOMRB	BCOM Unleaded Gas ER			
BCOMWH	BCOM Wheat ER			
BCOMKW	BCOM Kansas Wheat ER			
BCOMCL	BCOM WTI Crude Oil ER			
BCOMZS	BCOM Zinc ER			
BCOMAU	BCOM AUD ER			
BCOMEU	BCOM EUR ER			
BCOMGB	BCOM GBP ER			
ВСОМСН	BCOM CHF ER			
BCOMJY	BCOM JPY ER			
BCOMALC	BCOM Aluminum Capped ER			
BCOMKCC	BCOM Coffee Capped ER			
BCOMHGC	BCOM Copper Capped ER			
BCOMCLC	BCOM WTI Crude Oil Capped ER			
BCOMCNC	BCOM Corn Capped ER			
BCOMLCC	BCOM Cattle Capped ER			
BCOMCTC	BCOM Cotton Capped ER			
BCOMGCC	BCOM Gold Capped ER			
BCOMLHC	BCOM Lean Hogs Capped ER			
BCOMHOC	BCOM Heating Oil Capped ER			
BCOMKWC	BCOM Kansas Wheat Capped ER			
BCOMCOC	BCOM Brent Crude Capped ER			
BCOMNGC	BCOM Natural Gas Capped ER			
BCOMNIC	BCOM Nickel Capped ER			
BCOMSYC	BCOM Soybeans Capped ER			
BCOMBOC	BCOM Soybean Oil Capped ER			
BCOMSIC	BCOM Silver Capped ER			
BCOMSBC	BCOM Sugar Capped ER			
BCOMSMC	BCOM Soybean Meal Capped ER			
BCOMRBC	BCOM Unleaded Gas Capped ER			
BCOMWHC	BCOM Wheat Capped ER			
BCOMZSC	BCOM Zinc Capped ER			

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Abbr	Name			
BCOMTR	BCOM TR			
BCOMF1T	BCOM F1 TR			
BCOMF2T	BCOM F2 TR			
BCOMF3T	BCOM F3 TR			
BCOMF4T	BCOM F4 TR			
BCOMF5T	BCOM F5 TR			
BCOMF6T	BCOM F6 TR			
BCOMRS	BCOM Roll Select			
<u>DJCICN</u>	Dow Jones Commodity Index Corn			
DJCISB	Dow Jones Commodity Index Sugar			
<u>DJCILC</u>	Dow Jones Commodity Index Live Cattle			
DJCIAW	Dow Jones Commodity Index All Wheat			
SPGCCI	S&P GSCI			
SPGCBO	S&P GSCI Soybean Oil			
SPGCBR	S&P GSCI Brent Crude			
SPGCCC	S&P GSCI Cocoa			
SPGCCL	S&P GSCI Crude Oil			
SPGCCN	S&P GSCI Corn			
SPGCCT	S&P GSCI Cotton			
SPGCFC	S&P GSCI Feeder Cattle			
SPGCGC	S&P GSCI Gold			
SPGCGO	S&P GSCI Gasoline			
SPGCHG	S&P GSCI North American Copper			
SPGCHO	S&P GSCI Heating Oil			
SPGCHU	S&P GSCI Unleaded Gasoline			
SPGCIA	S&P GSCI Aluminum			
SPGCIC	S&P GSCI Copper			
SPGCIK	S&P GSCI Nickel			
SPGCIL	S&P GSCI Lead			
SPGCIN	S&P GSCI Industrial Metals			
SPGCIZ	S&P GSCI Zinc			
SPGCKC	S&P GSCI Coffee			
SPGCKW	S&P GSCI Kansas Wheat			
SPGCLC	S&P GSCI Live Cattle			
SPGCLH	S&P GSCI Lean Hogs			
SPGCNG	S&P GSCI Natural Gas			
SPGCPA	S&P GSCI Palladium			
SPGCPL	S&P GSCI Platinum			
SPGCSB	S&P GSCI Sugar			
SPGCSI	S&P GSCI Silver			
SPGCSO	S&P GSCI Soybeans			
SPGCWH	S&P GSCI Wheat			

Abbr	Name			
SPGSES	S&P GSCI Enhanced Commodity			
SPGSSM	S&P GSCI Soybean Meal			
SPGCCIP	S&P GSCI ER			
SPGCBRP	S&P GSCI Brent Crude ER			
SPGCCCP	S&P GSCI Cocoa ER			
SPGCCLP	S&P GSCI Crude Oil ER			
SPGCCNP	S&P GSCI Corn ER			
SPGCCTP	S&P GSCI Cotton ER			
SPGCENP	S&P GSCI Energy ER			
SPGCFCP	S&P GSCI Feeder Cattle ER			
SPGCGCP	S&P GSCI Gold ER			
SPGCGOP	S&P GSCI Gasoil ER			
SPGCHGP	S&P GSCI North American Copper ER			
SPGCHOP	S&P GSCI Heating Oil ER			
SPGCHUP	S&P GSCI Unleaded Gasoline ER			
SPGCIAP	S&P GSCI Aluminum ER			
SPGCICP	S&P GSCI Copper ER			
SPGCIKP	S&P GSCI Nickel ER			
SPGCILP	S&P GSCI Lead ER			
SPGCINP	S&P GSCI Industrial Metals ER			
SPGCNGP	S&P GSCI Natural Gas ER			
SG3MCI	S&P GSCI 3 Month Forward			

#### Commodity Index Swap Earliest and Latest Effective and Termination Dates

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Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termi
	Date		<b>Date</b>	<b>Date</b>
NT/A	N/A	N/A	N/A	N/A
N/A				1.71
<del>N/A</del>		p Notional Quantities p		1.71
<u>N/A</u>				Default

				or Colculation Dariod
Connoun	y much Swa	p Hotional Q	uantities p	er calculation renou

Currency	Minimum	Increment	Maximum	<b>Default</b>
USD	<del>10,000,000</del>	<del>1,000,000</del>	<del>N/A</del>	N/A

## **Deliverable Foreign Exchange Options**

Summary:	This covers "Deliverable Foreign Exchange Options".
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards:
	(a) the 1998 FX and Currency Option Definitions, as amended and supplemented from time to time, including the 2005 Barrier Option Supplement to the 1998 FX and Currency Option Definitions (the "1998 Definitions"); and
	(b) ISDA OTC Taxonomies.
Contract Types:	Each Deliverable Foreign Exchange Option traded is bespoke and the terms agreed between the Buyer and Seller. All option strategies result in call options and/or put options executed with the following strategies traded as agreed between the parties:
	Vanilla: Outright Call / Put, Straddle, Strangle, Butterfly, Risk Reversal, Calendar (tenor) spread, Cross Currency Spread, Condor, Call Spread, Put Spread, Live Trading with no delta hedge.
	Exotic: Barriers, Baskets, Digitals (or Binary), Knockins, Knockouts, Reverse Knockins/Kockouts, No Touch, Double No Touch, Average Price, Worst of Options, Compound Options; trades may be with or without delta hedges and some structures may also be bilaterally negotiated with additional options as part of the package to form a vega hedge.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Foreign Exchange
ISDA OTC Base Product:	Vanilla Option, Simple Exotic or Complex Exotic
Terms:	
Trade Date:	The date the transaction is agreed between and becomes legally binding on the parties.
Commencement Date:	The Trade Date, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.
Buyer:	As specified by the parties.
Seller:	As specified by the parties.
Currency Option Style:	As specified by the parties.
	(An American option can be exercised any time up to and including the Expiration Date; a European option can only be exercised on the Expiration Date.)

Currency Option Type:	A Call with respect to the Call Currency and a Put with respect to the Put Currency; Binary in the case of a binary or digital option.
Call Currency:	The currency as specified by the parties from among those included in the list of available Currency Pairs.
	The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.
Call Currency Amount:	As specified by the parties or, if not so specified, derived from the Put Currency Amount and Strike Price.
Put Currency:	The currency as specified by the parties from among those included in the list of available Currency Pairs.
	The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.
Put Currency Amount:	As specified by the parties or, if not so specified, derived from the Call Currency Amount and Strike Price.
Strike Price:	As specified by the parties (if only one of the Put Currency or Call Currency is specified).
	If no Strike Price is specified and Automatic Exercise is applicable, the Strike Price will be calculated using the Put Currency and Call Currency in order to determine if the option is to be automatically exercised.
Reference Currency:	As specified by the parties.
Settlement Currency:	As specified by the parties.
Settlement Rate:	As specified by the parties or otherwise per the 1998 Definitions.
Settlement Rate Option:	As specified by the parties.
Expiration Date:	As specified by the parties.
Expiration Time:	The time in the location specified by the parities.
Latest Exercise Time:	The Expiration Time, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.
Automatic Exercise:	Applicable, unless otherwise specified by the parties.
Settlement:	Deliverable or Cash Settlement
Settlement Amount:	In the case of a digital or binary option, as specified by the parties.
Settlement Date:	As specified by the parties.
Valuation Date:	As specified by the parties.
Averaging Dates:	As specified by the parties.
Premium:	As specified by the parties.
Premium Payment Date:	As specified by the parties.

Barrier Event:	As specified by the parties.
Calculation Agent:	As specified by the parties.
Business Day:	As specified by the parties.
Business Day Convention:	As specified by the parties.
Disruption Events:	As specified by the parties.
Disruption Fallbacks:	As specified by the parties for each applicable Disruption Event or otherwise per the 1998 Definitions.

## Deliverable Foreign Exchange Option Available Currency Pairs

AUD/CAD	CNH/AUD	EUR/SAR	JPY/CNH	THB/HKD
AUD/CHF	CNH/CAD	EUR/SEK	JPY/HKD	THB/JPY
AUD/CNH	CNH/EUR	EUR/SGD	JPY/SGD	THB/NZD
AUD/HKD	CNH/GBP	EUR/THB	JPY/THB	THB/SGD
AUD/JPY	CNH/HKD	EUR/TRY	MXN/JPY	TRY/JPY
AUD/MXN	CNH/JPY	EUR/USD	NOK/JPY	USD/AED
AUD/NOK	CNH/NZD	EUR/ZAR	NOK/SEK	USD/BHD
AUD/NZD	CNH/SGD	GBP/AUD	NZD/CAD	USD/CAD
AUD/SEK	CNH/THB	GBP/CAD	NZD/CHF	USD/CHF
AUD/SGD	EUR/AED	GBP/CHF	NZD/CNH	USD/CNH
AUD/THB	EUR/AUD	GBP/CNH	NZD/HKD	USD/CZK
AUD/USD	EUR/BHD	GBP/HKD	NZD/JPY	USD/DKK
AUD/ZAR	EUR/CAD	GBP/JPY	NZD/NOK	USD/HKD
CAD/CHF	EUR/CHF	GBP/MXN	NZD/SEK	USD/HUF
CAD/CNH	EUR/CNH	GBP/NOK	NZD/SGD	USD/ILS
CAD/HKD	EUR/CZK	GBP/NZD	NZD/THB	USD/ISK
CAD/JPY	EUR/DKK	GBP/SEK	NZD/USD	USD/JPY
CAD/MXN	EUR/GBP	GBP/SGD	SEK/JPY	USD/KWD
CAD/NOK	EUR/HKD	GBP/THB	SGD/AUD	USD/MXN
CAD/SEK	EUR/HUF	GBP/TRY	SGD/CAD	USD/NOK
CAD/SGD	EUR/ILS	GBP/USD	SGD/CNH	USD/OMR
CAD/THB	EUR/ISK	GBP/ZAR	SGD/EUR	USD/PLN
CHF/CNH	EUR/JPY	HKD/AUD	SGD/GBP	USD/QAR
CHF/HKD	EUR/KWD	HKD/CAD	SGD/HKD	USD/RON
CHF/JPY	EUR/MXN	HKD/CHF	SGD/JPY	USD/RUB
CHF/MXN	EUR/NOK	HKD/CNH	SGD/NZD	USD/SAR
		•	•	

CHF/NOK	EUR/NZD	HKD/EUR	SGD/THB	USD/SEK
CHF/PLN	EUR/OMR	HKD/GBP	THB/AUD	USD/SGD
CHF/SEK	EUR/PLN	HKD/JPY	THB/CHF	USD/THB
CHF/SGD	EUR/QAR	HKD/NZD	THB/CNH	USD/TRY
CHF/THB	EUR/RON	HKD/SGD	THB/EUR	USD/ZAR
CHF/TRY	EUR/RUB	HKD/THB	THB/GBP	ZAR/JPY

# **Equity Index Swaps**

Summary:	This covers equity index swaps (each, an "Equity Index Swap").
Limitations on Available Selections and Default Settings:	The terms under which an Equity Index Swap may be traded are shown below or in the attached tables.
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made.
	For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.
	In some cases, the same contract might have different terms depending on the market in which it is traded ( <i>e.g.</i> , London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards:
	<ul><li>(a) 2006 ISDA Definitions</li><li>(b) 2002 ISDA Equity Derivatives Definitions ("Equity Definitions")</li></ul>
	<ul> <li>(c) Annex IS to 2009 Americas Master Equity</li> <li>Derivatives Confirmation, to 2007 European Master</li> <li>Equity Derivatives Confirmation Agreement (for EMEA indices, as indicated on the Equity Index Available</li> <li>Indices attached) or to Second Revised 2005 AEJ</li> </ul>
	Interdealer Master Equity Derivatives Confirmation Agreement (for AEJ indices, as indicated on the Equity Index Available Indices attached) (d) the Revised ISDA AEJ Reference Price Source

	Matrix (June 25, 2009, or as updated effective prior to	
	the Trade Date) ("AEJ Source")	
	For convenience, certain terms are mapped to their	
	FpML 5.5 equivalent.	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Equity	
ISDA OTC Base Product:	Swap	
ISDA OTC Sub-Product:	Price Return Basic Performance	
ISDA OTC Transaction type:	Single Index	
Further Limitations:	None	
Terms:		
Trade Date:	As agreed by the parties.	
Strike Date:	For a Forward Starting Transaction, as agreed by the parties (only for EMEA Indices).	
Forward Starting:	As per Annex IS (only for EMEA Indices).	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see	
	below) agreed by the parties.	
Effective Date ("effectiveDate"):	(i) The date specified by the parties, adjusted in	
	accordance with any applicable Business Day	
	Convention, or (ii) in the case of AEJ Indices, per	
	Annex IS.	
Effective Date Business Days:	As specified by the parties from among the Available Business Days (except for AEJ Indices).	
Effective Date Business Day Convention:	As specified by the parties from among the Available	
Encenve Date Dusiness Day Convention.	Business Day Conventions (except for AEJ Indices).	
Termination Date ("terminationDate"):	Per Annex IS, unless otherwise specified by the parties.	
Index:	As specified by the parties from among the Available	
Indox.	Indices.	
Number of Index Units:	As specified by the parties or, if not so specified,	
	determined by Annex IS (except for AEJ Indices).	
Index Unit:	Per Annex IS (except for AEJ Indices and EMEA Indices).	
Exchange(s):	(i) Per Annex IS, unless otherwise specified by the	
	parties, or (ii) in the case of AEJ Indices, as specified by	
	the parties.	
Multiple Exchange Index Annex/Component Security	Per Annex IS (EMEA Indices only).	
Index Annex:		
Related Exchanges:	(i) Per Annex IS, unless otherwise specified by the	
-	parties, or (ii) in the case of AEJ Indices, as specified by	
	the parties.	
Hedging Party:	(i) As specified by the parties, or (ii) in the case of AEJ	
	Indices, per Annex IS.	
Determining Party:	(i) As specified by the parties, or (ii) in the case of AEJ	
	Indices, per Annex IS.	
Equity Amounts:		
Equity Amount Payer ("payerPartyReference"):	As specified by the parties.	
Equity Notional Amount:	As specified by the parties.	
Equity Notional Reset:	As per Annex IS.	
Type of Return:	(i) As specified by the parties, or (ii) in the case of AEJ	
	Indices, per Annex IS unless specified by the parties.	
Initial Price Election:	As specified by the parties (in the case of an EMEA Index only).	
Initial Price:	As specified by the parties and (other than in the case of	
	As specified by the parties and (other than in the case of AEJ Indices) adjusted in accordance with Annex IS.	

Final Price Election:	As specified by the parties (in the case of an EMEA Index only).	
Final Price:	(i) As per Annex IS, or (ii) in the case of AEJ Indices, as specified by the parties or, if not so specified, per the Equity Definitions.	
Valuation Time:	<ul> <li>(i) As per Annex IS, or (ii) in the case of AEJ Indices, as specified by the parties or, if not so specified, per the Equity Definitions.</li> </ul>	
Valuation Dates:	As specified by the parties.	
Averaging Dates:	In the case of AEJ Indices, as and if specified by the parties.	
Floating Amount:		
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.	
Notional Amount ("notionalAmount"):	(i) As per Annex IS, or (ii) in the case of AEJ Indices, as specified by the parties or, if not so specified, per the Equity Definitions.	
Payment Dates:	As per Annex IS, unless otherwise specified by the parties.	
Initial Floating Rate:	As specified by the parties.	
Floating Rate Option ("floatingRateIndex"):	As specified by the parties.	
Designated Maturity ("indexTenor"):	As specified by the parties.	
Linear Interpolation:	For the Calculation Periods specified by the parties to the extent permitted by Annex IS.	
Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.	
Longer Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.	
Spread:	As specified by the parties.	
Day Count Fraction:	As specified by the parties.	
Reset Dates ("resetDate"):	As per Annex IS.	
Payment Dates Business Days:	As per Annex IS.	
Business Days (Other Than Payment Dates):	As specified by the parties.	
Business Day Convention (Other Than Payment Dates):	As per Annex IS, unless otherwise specified by the parties.	
Compounding:	As specified by the parties (EMEA Indices only).	
Compounding Dates:	As specified by the parties if Compounding is applicable (EMEA Indices only).	
Futures Price Valuation:		
Futures Price Valuation:	(i) As per Annex IS, unless otherwise specified by the parties, or (ii) in the case of AEJ Indices, as specified by the parties or, if not so specified, per the Equity Definitions.	
Exchange-traded Contract:	As specified in the Transaction Supplement.	
Adjustment to Section 6.8 of the Equity Definitions:	As per Annex IS (other than in the case of AEJ Indices).	
Settlement Terms:		
Cash Settlement:	As per Annex IS.	
Settlement Currency:	(i) As per Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties.	
FX Rate:	As agreed by the parties or as specified by the parties from among the Available FX Rates.	

Dividends:		
Dividend Payment Date(s):	If type of return is "Total Return" (i) as per Annex IS unless otherwise agreed by the parties, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such	
Dividend Period:	agreement, per the Equity Definitions. If type of return is "Total Return" (i) as per Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity	
Dividend Amount:	Definitions. If type of return is "Total Return" (i) as per Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definitions.	
Relevant Dividend:	If type of return is "Total Return" (i) as per Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definitions.	
Reinvestment of Dividends:	If type of return is "Total Return" (i) as per Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties.	
Dividend Recovery:	If type of return is "Total Return" (i) as per Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definitions.	
Declared Cash Dividend Percentage:	If type of return is "Total Return" (i) as per Annex IS unless otherwise agreed by the parties, (ii) in the case of AEJ Indices, as and if agreed by the parties, or (iii) in the case of EMEA Indices, as agreed by the parties.	
Declared Cash Equivalent Dividend Percentage:	If type of return is "Total Return" (i) as per Annex IS unless otherwise agreed by the parties, or (ii) in the case of AEJ Indices, as and if agreed by the parties.	
Index Adjustment Events:		
Index Cancellation:	As per Annex IS.	
Index Modification:	As per Annex IS.	
Index Disruption:	As per Annex IS.	
Additional Disruption Events: Change in Law:	(i) As agreed by the parties from among the provisions in Annex IS, or (ii) in the case of AEJ Indices, as per Annex IS unless otherwise agreed by the parties.	
Insolvency Filing:	<ul> <li>(i) As per Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definitions.</li> </ul>	
Hedging Disruption:	<ul> <li>(i) As agreed by the parties from among the provisions in Annex IS, or (ii) in the case of AEJ Indices, as per Annex IS (as applicable to the relevant country of underlier) unless otherwise agreed by the parties.</li> </ul>	
Increased Cost of Hedging:	<ul> <li>(i) As agreed by the parties from among the provisions in Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definition.</li> </ul>	
Consequences of Hedging Disruption:	<ul> <li>(i) As agreed by the parties from among the provisions</li> <li>in Annex IS, or (ii) in the case of AEJ Indices, as agreed</li> <li>by the parties or, absent such agreement, per the Equity</li> <li>Definition.</li> </ul>	
Loss of Stock Borrow:	(i) As per Annex IS, unless otherwise specified by the	

	parties, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definition.	
Increased Cost of Stock Borrow:	(i) As per Annex IS, unless otherwise specified by the parties, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definition.	
Cancellation Amount:	(i) As agreed by the parties from among the provisions in Annex IS, or (ii) in the case of AEJ Indices, as agreed by the parties or, absent such agreement, per the Equity Definition.	
Non-Reliance:	As per Annex IS.	
Agreements and Acknowledgements Regarding Hedging Activities:	As per Annex IS.	
Additional Acknowledgements:	As per Annex IS.	
Index Disclaimer:	As per Annex IS.	
Optional Early Termination:	(i) As agreed by the parties from among the provisions in Annex IS, or (ii) in the case of AEJ Indices, inapplicable.	
Break Funding Recovery:	If Optional Early Termination is applicable, as specified by the parties.	
Break Fee:	As specified by the parties in the case of EMEA Indices.	
Calculation Agent:	(i) As agreed by the parties, or (ii) in the case of AEJ Indices, per Annex IS unless otherwise agreed by the parties.	

### Equity Index Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	САТО
EUR	Euro	EUTA
GBP	Sterling	GBLO
HKD	Hong Kong Dollar	НКНК
JPY	Japanese Yen	JPTO
KRW	Korean Won	KRSE
SEK	Swedish Krona	SEST
USD	United States Dollars	USNY

#### Equity Index Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

### Equity Index Available Indices

Abbr	Name
AEX	AEX Index (EMEA)
AMZX	Alerian MLP Index Total Return

AMZIXVWAP	Alerian MLP Infrastructure Index Total Return VWAP
AS51	S&P/ASX 200 (AEJ)
BEL20	BEL20 Index (EMEA)
CAC	Cotation Assistée en Continu 40 (EMEA)
DAX	Deutscher Aktien Index (EMEA)
DJITR	Dow Jones Industrial Average Total Return
DJUSRE	Dow Jones U.S. Real Estate Index
EWTRGSPC	REUTERS – REU - S&P EW 500 INDEX
FTSEMIB	FTSE MIB Index (EMEA)
GCUDCA	MSCI Daily TR Gross Small Cap Canada USD
GCUDUS	MSCI Daily Total Return Gross Small Cap USA USD
GDDLCA	MSCI Canada Index CAD Total Return (Gross Dividends)
GDDUCA	MSCI Canada Index USD Daily Total Return (Gross Dividends)
GDDUEAFE	MSCI EAFE Index Total Return (Gross Dividends)
GDDUNA	MSCI North American Index USD Total Return (Gross Dividends)
GDDUUS	MSCI US Index Total Return (Gross Dividends)
HSCEI	Hang Seng China Enterprises Index (AEJ)
HSI	Hang Seng Index (AEJ)
IBEX	IBEX 35 Index(EMEA)
IBOV	BOVESPA Index
IXBTR	S&P 500 Material Select Sector Total Return
IXCPR	Communication Services Select Sector Index
IXCTR	Communication Services Select Sector Index TR
IXETR	S&P 500 Energy Select Sector Total Return
IXITR	S&P 500 Industrials Select Sector Total Return
IXMTR	S&P 500 Financials Select Sector Total Return
IXRTR	S&P 500 Consumer Staples Select Sector Total Return
IXTTR	S&P 500 Technology Select Sector Total Return
IXUTR	S&P 500 Utilities Select Sector Total Return
IXVTR	S&P 500 Health Care Select Sector Total Return
IXYTR	S&P 500 Consumer Discretionary Select Sector Total Return
KOSPI	Korea Composite Stock Price Index (AEJ)
M1CNA	MSCI China A Inclusion USD Index (Net)
MEXBOL	Mexican IPC Index (Indice de Precios y Cotizaciones)
MSLUELAN	MSCI Emerging Markets Latin America Small Cap Index (USD) (Net Dividends)
NDDLCA	MSCI Canada Index CAD Total Return (Net Dividends)
NDDUEAFE	MSCI EAFE Net Total Return USD Index
NDDUNA	MSCI North American Index USD Total Return (Net Dividends)
NDDUUS	MSCI US Index Total Return (Net Dividends)
NDDUJN	MSCI Japan Index Total Return (Net Dividends)
NDEUMXF	MSCI Mexico Index USD Total Return (Net Dividends)
NDEUSCH	MSCI Chile Index Total Return (Net Dividends)
NDEUSCO	MSCI Colombia Index Total Return (Net Dividends)
NDEUSPR	MSCI Peru Index Total Return (Net Dividends)
NDUEBRAF	MSCI Brazil Index USD Total Return (Net Dividends)
NDUEEGFL	MSCI Emerging Markets Latin America USD
NDX	NASDAQ-100
NKY	Nikkei 225 Index (AEJ)
OEXT	S&P 100 Total Return
OMX	OMX Stockholm 30 (EMEA)
RGUSFL	Russell 1000 Financial
RU10GRTR	Russell 1000 Growth Total Return
RU10INTR	Russell 1000 Total Return
RU10VATR	Russell 1000 Value Total Return
NUIUVAIN	

Russell 2000 Growth Total Return
Russell 2000 Total Return
Russell 2000 Value Total Return
S&P 500 Low Volatility Total Return Index
S&P Biotechnology Select Industry Total Return Index
S&P Oil & Gas Exploration & Production Select Industry Index
S&P 500 Consumer Discretionary Sector Total Return Index
S&P 500 Consumer Staples Sector Total Return Index
S&P 500 Energy Sector Total Return Index
S&P 500 Financials Sector Total Return Index
S&P 500 Health Care Sector Total Return Index
S&P 500 Industrials Sector Total Return Index
S&P 500 Materials Sector Total Return Index
S&P MidCap 400 Total Return
S&P 500 Real Estate Sector Total Return Index
S&P SmallCap 600 Total Return
S&P 500 Value Total Return Index
S&P 500 Utilities Sector Total Return Index
S&P 500 Total Return
Eurostoxx 50 Index (EMEA)
S&P/TSX 60 Index
FTSE 100 Index (EMEA)
NASDAQ-100 Total Return
PHLX Semiconductor Sector Index Total Return

#### Equity Index Available FX Rates

Currency Pair	Available FX Rates
KRW/USD	BB: The rate implied by sourcing the Index on
	Bloomberg via "KOSPI>USD>GO"
	ISDA: The rate determined in accordance with the AEJ
	Source

#### Equity Index Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

### Equity Index Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termination
	Date		Date	Date
N/A	N/A	N/A	N/A	N/A

### Equity Index Notional Amounts

Currency	Minimum	Increment	Maximum	Default
USD	10,000,000	1,000,000	N/A	N/A

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-AONIA-OIS-COMPOUND- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-AUBBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Quarterly Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Semi-annual Swap Rate- ICAP	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Semi-Annual Swap Rate- ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Swap Rate-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-CDOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-ISDD	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
CAD-CORRA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-ISDD	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	N

Equity Index Floating Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-Annual Swap Rate-10:00- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-10:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS-COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap-Index	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Act/365	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Act/365- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate- 11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TMM-CDC-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP USD-Basis Swaps-11:00- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-SONIA-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-RONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIBOR-ATHIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIMID-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIMID-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HIBOR=	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HKAB	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HKAB-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HONIX-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-ISDA-Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-ISDA-Swap Rate-4:00	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly-Annual Swap	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Rate-11:00-BGCANTOR				
HKD-Quarterly-Annual Swap Rate-4:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF-Bloomberg-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF-Bloomberg-15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate-15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL-TONAR	All quoted tenors	N/A	Per ISDA 2006	N
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TONA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters-15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate-15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
KRW-CD-3220	All quoted tenors	N/A	Per ISDA 2006	Ν
KRW-CD-KSDA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
KRW-Quarterly Annual Swap Rate-3:30-ICAP	3M	N/A	Per ISDA 2006	N
KRW-Bond-3222	3M	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-SIOR-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	N
SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reference Banks- ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds-H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-LON-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SOFR-Compound	N/A	N/A	N/A	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate-ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate-T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate-T500	All quoted tenors	N/A	Per ISDA 2006	Ν

### Equity Index Requirements and Defaults

Date	Requirement	Default
Effective Date Business Day		No Adjustment
Convention		
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation		longer than the actual Calculation
_		Period length

# **Equity Index Variance Swaps**

Summary/Contract Description:	This covers equity index variance swaps (each, an "Equity Index Variance Swap"). An Equity Index Variance Swap is a product used to hedge or take a direct view on the volatility of an underlying equity index by paying or receiving an amount based on the difference between the actual realized variance of an index over the life of the contract and the variance strike price agreed at contract inception.	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Equity	
ISDA OTC Base Product:	Swap	
ISDA OTC Sub-Product:	Parameter Return Variance	
ISDA OTC Transaction type:	Single Index	
Available Underlying Indices:	The index specified by the parties from among the indices listed in the table below titled "Equity Index Variance Swap Available Indices."	
Contract Size:	The contracts are quoted in "Vega" amounts. The minimum contract size is 1,000 of the currency of which the underlying index settles in.	
Quoting Convention:	The contracts are quoted in volatility percentage points.	
Leg Conventions:	Floating Leg Rate – The realized variance rate that is calculated on the Expiration Date.	
	Fixed Leg Rate – The agreed fixed rate of variance (Traded Price).	
Tenor:	Tenors of any duration greater than 0 years and less than 50 years.	
Trade Types:	Capped – the maximum payout of the contract is capped at an agreed price.	
	Uncapped – there is no maximum payout on the contract.	
Trade Start Types:	Immediate – the observation period of the contract begins on the Trade Date.	
	Forward – the observation period of the contract begins on an agreed-upon date after the Trade Date.	
Trade Date:	The date on which the contract is entered into.	
Observation Start Date:	The Trade Date or, in the case of a forward starting transaction, an agreed-upon date after the Trade Date.	
Valuation Date:	The date upon which the final rate of volatility will be calculated on using the "Applicable Formula" below.	
Settlement:	The contracts are cash settled. If the difference between the realized variance and the "Variance Strike" (as	

	agreed by the parties) is positive the seller pays the difference to the buyer. If the difference between the realized variance and the Variance Strike is negative the buyer pays the difference to the seller.	
	Settlement of the contract occurs after the Valuation Date and in line with the settlement convention of the underlying equity index.	
Settlement Payments/Payment Date:	T+2 (adjustments according to following business day convention).	
Minimum Price or Incremental Price:	The contracts are quoted in volatility percentage points. There is no minimum price or minimum incremental price for the contract.	
Payment Frequency:	One time.	
Payment Exchange:	The buyer of a variance swap pays a fixed rate (the Variance Strike) in exchange for a payout based on the daily realized variance.	
	The seller of a variance swap receives a fixed rate (the Variance Strike) in exchange for a payout based on the daily realized variance.	
Day Count:	Business Days Per Year = 252	
Business Day Convention:	Following business day convention.	
Applicable Formula:	The final realized rate of variance will be calculated using the following formula: $100x\sqrt{\frac{252 \times \sum_{i=1}^{n} (\text{Return(i)})^{2}}{N}}$	
	Where: $Return(i) = ln(\frac{Index_i}{Index_{i-1}})$	
	n = the number of observations excluding the initial observation on the Observation Start Date, but including the Valuation Date;	
	i = the relevant observation day;	
	Index <sub>i</sub> = the closing level of the underlying index "i" business days from the Observation Start Date, except for (i) Index <sub>0</sub> which shall equal the initial index level, and (ii) Index <sub>n</sub> which shall equal the closing level of the underlying index on the Valuation Date. Index <sub>i-1</sub> will be modified by deducting the dividend in case it is an ex- date.	
	If applicable, the volatility cap will be set at 2.5x the Volatility Strike.	
	N = Expected number of observations as agreed by the	

	parties. ln = the natural logarithm.	
	III – the hatural logarithm.	
Market Disruption:	As specified by the parties.	

## Equity Index Variance Swap Available Indices

Abbr	Name
DAX	Deutscher Aktien Index
DJITR	Dow Jones Industrial Average Total Return
DJUSRE	Dow Jones U.S. Real Estate Index
FTXIN25	FTSE China 50 Index
GDDLCA	MSCI Canada Index CAD Total Return (Gross Dividends)
GDDUEAFE	MSCI EAFE Index Total Return (Gross Dividends)
GDDUNA	MSCI North American Index USD Total Return (Gross Dividends)
GDDUUS	MSCI US Index Total Return (Gross Dividends)
HSCEI	Hang Seng China Enterprises Index
HSI	Hang Seng Index
IBOV	BOVESPA Index
KOSPI	Korea Composite Stock Price Index
MDCPSPTR	S&P MidCap 400 Total Return
MEXBOL	Mexican IPC index (Indice de Precios y Cotizaciones)
NDDLCA	MSCI Canada Index CAD Total Return (Net Dividends)
NDDUNA	MSCI North American Index USD Total Return (Net Dividends)
NDDUUS	MSCI US Index Total Return (Net Dividends)
NDEUBRAF	MSCI Brazil Index USD Total Return (Net Dividends)
NDEUMXF	MSCI Mexico Index USD Total Return (Net Dividends)
NDEUSCH	MSCI Chile Index Total Return (Net Dividends)
NDEUSCO	MSCI Colombia Index Total Return (Net Dividends)
NDUEEGF	MSCI Emerging Markets Index
NDUEEGFL	MSCI Emerging Markets Latin America USD
NDX	NASDAQ-100
OEXT	S&P 100 Total Return
RGUSFL	Russell 1000 Financial
RU10GRTR	Russell 1000 Growth Total Return
RU10INTR	Russell 1000 Total Return
RU10VATR	Russell 1000 Value Total Return
RU20GRTR	Russell 2000 Growth Total Return
RU20INTR	Russell 2000 Total Return
RU20VATR	Russell 2000 Value Total Return
SMCPSPTR	S&P SmallCap 600 Total Return
SPXT	S&P 500 Total Return
SX5E	Eurostoxx 50 Index
UKX	FTSE 100 Index

# **Equity Index Volatility Swaps**

Summary:	This covers equity index volatility swaps (each, an "Equity Index Volatility Swap").	
Limitations on Available Selections and Default Settings:	<ul> <li>"Equity Index Volatility Swap").</li> <li>The terms under which an Equity Index Volatility Swap may be traded are shown below or in the attached tables. For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</li> <li>For Business Days, the defaults shall be the locations specified for the relevant currency.</li> <li>The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made.</li> <li>For these purposes "TARGET" is considered a location. In many cases there are normal "vanilla" terms on which the parties will transact.</li> <li>These are shown as "Default " and will apply unless the parties vary them.</li> <li>It should be noted that these contracts can be traded in a variety of currencies.</li> <li>Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.</li> <li>In some cases, the same contract might have different terms depending on the market in which it is traded (<i>e.g.</i>, London versus NY).</li> </ul>	
Incorporated Standards:	In that case the default settings may vary by market. This contract description incorporates by reference the following industry standard documentation and standards: (a) 2006 ISDA Definitions (b) 2002 ISDA Equity Derivatives Definitions (c) Annex IVS to: (i) the 2006 Japan Master Variance Swap Confirmation Agreement for Japan Indices, (ii) the 2007 Americas Master Variance Swap Confirmation Agreement, (iii) the Revised 2007 AEJ Master Variance Swap Confirmation Agreement for AEJ indices, or (iv) the 2007 European Variance Swap Master Confirmation Agreement for EMEA Indices (as indicated on the Equity Index Volatility Swap –Available Indices below) (d) the Market Practice Statement for Variance Swap Transactions Involving Japanese Shares or Indices Regarding When Exchange-Imposed Daily Price Limitations Would Constitute a Market Disruption Event Due To a Trading Disruption published by ISDA on October 22, 2009 (the "Japan Index Market Practice Statement") For convenience, certain terms are mapped to their FpML 5.5 equivalent.	

Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Equity	
ISDA OTC Base Product:	Swap	
ISDA OTC Sub-Product:	Parameter Return Volatility	
ISDA OTC Transaction Type:	Single Index	
Further Limitations:	None.	
Terms:		
Trade Date:	As agreed by the parties.	
Effective Date ("effectiveDate"):	As per Annex IVS (other than for a Japan Index).	
Termination Date ("terminationDate"):	As per Annex IVS.	
Exchanges:	As specified by the parties.	
Related Exchanges:	As per Annex IVS.	
Volatility Buyer:	Not applicable.	
Volatility Seller:	Not applicable.	
Volatility Cap:	If applicable, as specified by the parties.	
Index:	As specified by the parties from among the Equity Index	
Index.	Volatility Swap – Available Indices (see below).	
Equity Amounts:	Volatility Swap – Available indices (see below).	
Equity Amounts: Equity Amount Payer ("payerPartyReference"):	The Volatility Seller.	
Equity Amount Fayer ( ) by Faity Reference ).	As specified by the parties (other than for an EMEA	
	Index).	
Equity Notional Reset:	As per Annex IVS.	
Type of Return:	As per Annex IVS.	
Initial Price:	As per Annex IVS.	
Final Price:	As per Annex IVS. As per Annex IVS.	
Valuation Time:		
Observation Start Date:	As per Annex IVS.	
Observation Start Date:	As specified by the parties or otherwise as per Annex IVS.	
Observation End Date:	As per Annex IVS.	
Observation Day:	As per Annex IVS. As per Annex IVS (with Disrupted Date being	
	determined, in the case of a Japan Index, in accordance	
	determined, in the case of a Japan Index, in accordance with the Japan Index Market Practice Statement).	
Non-Disrupted Observation Day:	As per Annex IVS.	
Observation Period:	As per Annex IVS.	
Futures Price Valuation:	As specified by the parties or determined in accordance	
	with Annex IVS.	
Default Exchange-traded Contract:	As per Annex IVS.	
Equity Amount:	The product of the Equity Notional Amount and the	
	Final Realized Volatility (or, if there is a Volatility Cap,	
	the lesser of the Realized Volatility or the Volatility	
	Cap).	
Variance Strike Price:	Not applicable.	
Variance Cap:	Not applicable.	
Final Realized Volatility:	As per Annex IVS.	
Initial Index Level:	As specified by the parties.	
Closing Index Level:	If specified by the parties, and determined per Annex	
, č	IVS.	
Expiring Contract Level:	If specified by the parties or as determined per Annex	
	IVS.	
Variance Amount:	Not applicable.	
Volatility Strike Price:	Not applicable.	
Variance Strike Price:	Not applicable.	
Variance Cap Amount:	Not applicable.	
Final Realized Volatility ("FRV"):	Per Annex IVS.	

N:	As specified by the parties or otherwise per Annex IVS (other than for an AEJ Index).	
Expected N:	As specified by the parties or otherwise per Annex IV (only for an AEJ Index).	
Market Disruption Event:	As per Annex IVS.	
Fixed Amount:		
Fixed Amount Payer:	The Volatility Buyer.	
Fixed Amount:	The product of the Equity Notional Amount and the Volatility Strike.	
Volatility Strike:	As specified by the parties.	
Settlement Terms:		
Cash Settlement:	As per Annex IVS.	
Settlement Currency:	As per Annex IVS.	
Cash Settlement Payment Date:	As per Annex IVS.	
Index Adjustment Events:		
Index Cancellation:	As per Annex IVS.	
Index Modification:	As per Annex IVS.	
Index Disruption:	As per Annex IVS.	
IVS Cancellation and Payment:	As per Annex IVS.	
Additional Disruption Events:		
Change in Law:	As per Annex IVS.	
Non-Reliance:	As per Annex IVS.	
Agreements and Acknowledgements Regarding	As per Annex IVS.	
Hedging Activities:		
Additional Acknowledgements:	As per Annex IVS.	
Index Disclaimer:	As per Annex IVS.	
Calculation Agent:	As agreed by the parties.	

## Equity Index Volatility Swap - Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY

### Equity Index Volatility Swap – Available Indices

Abbr	Name
SPX	S&P 500 Index
SPXT	S&P 500 Total Return

# **Fixed for Floating Agricultural Swaptions**

Summary:	This covers uncleared fixed for floating agricultural swaptions ("Fixed for Floating Agricultural Swaptions").	
Limitations on Available Selections and Default Settings:	The terms under which Fixed for Floating Agricultural Swaptions may be traded are shown below and in the attached tables.	
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards: 2005 ISDA Commodity Derivatives Definitions ("Commodity Definitions")	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Commodity	
ISDA OTC Base Product:	Agricultural	
ISDA OTC Settlement type:	Cash	
Further Limitations:	None	
Trade Date:	As agreed by the parties.	
Option Style:	As specified by the parties from among the Available Option Styles.	
Option Type:	Swaption	
Buyer:	As specified by the parties.	
Seller:	As specified by the parties.	
Total Premium:	As specified by the parties.	
Premium Payment Date(s):	As specified by the parties, subject to adjustment in accordance with the Business Day Convention.	
Premium Payment Date Business Days:	Per the Available Currencies, plus such additional Business Days as the parties specify.	
Premium Payment Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions or otherwise per the Commodity Definitions.	
Physical/Contract Settlement:	Applicable	
Procedure for Exercise:		
Exercise Period:	For an American Option, the period of days and the times on such days specified by the parties. For any other Option Style, the times on the Expiration Date or Potential Exercise Date specified by the parties.	
Potential Exercise Dates:	For a Bermuda Option, the days specified by the parties.	
Expiration Date:	As specified by the parties.	
Expiration Time:	As specified by the parties.	
Automatic Exercise:	Applicable, unless otherwise specified by the parties.	
Written Confirmation:	As specified by the parties.	
Seller's Notice Information:	As specified by the Seller.	
Terms of the Underlying Transaction to which the S		
Trade Date:	As agreed by the parties.	
Effective Date:	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention.	
Effective Date Business Days:	None, unless specified by the parties.	
Effective Date Business Day Convention:	None, unless specified by the parties. None, unless specified by the parties from among the Available Business Day Conventions.	
Termination Date:	As specified by the parties.	

Termination Date Business Days:	None, unless specified by the parties.	
Termination Date Business Day Convention:	None, unless specified by the parties from among the	
5	Available Business Day Conventions.	
Commodity:	As specified by the parties from among the Available Commodities.	
,		
Total Notional Quantity:	The sum of the Notional Quantities per Calculation	
-	Period.	
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period	
	Basis.	
Calculation Periods:	As specified by the parties.	
Calculation Period Business Days:	None, unless specified by the parties.	
Calculation Period Business Day Convention:	As specified by the parties from among the Available	
	Business Day Conventions.	
Payment Dates:	In relation to each Calculation Period, as specified by	
	the parties, each such day being subject to adjustment in	
	accordance with the Payment Date Business Day	
	Convention.	
Payment Date Business Days:	The Business Days specified for the relevant	
	Commodity, plus any additional Business Days specified	
Provide Provid	by the parties from among the Available Business Days.	
Payment Date Business Day Convention:	As specified by the parties from among the Available	
Fixed Amount:	Business Day Conventions.	
Fixed Amount: Fixed Price Payer:	As appriciately the parties	
Fixed Price Payer: Fixed Price or Fixed Amount:	<ul><li>As specified by the parties.</li><li>As specified by the parties per Unit of the Commodity or</li></ul>	
Fixed Flice of Fixed Allount:	As specified by the parties per Unit of the Commodity or overall.	
Floating Amount:		
Floating Price Paver:	As specified by the parties.	
Applicable Spread:	As specified by the parties.	
Commodity Reference Price:	As specified by the parties. As specified by the parties from among the Available	
commounty reference Trice.	Commodity Reference Prices.	
Market Disruption:		
Market Disruption Events:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Additional Market Disruption Events:	As specified by the parties.	
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Disruption Fallbacks:	Unless otherwise specified by the parties, per the	
-	Commodity Definitions.	
Fallback Reference Price:	None, unless specified by the parties.	
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the	
	Commodity Definitions.	
Calculation Agent:	As agreed by the parties.	

Fixed for Floating Agricultural Swaptions Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY
EUR	Euro	EUTA
GBP	Sterling	GBLO

### Fixed-for-Floating Agricultural Swaptions Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

Fixed-for-Floating Agricultural Swaptions Available Commodity Reference Prices

#### **ISDA Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

ISDA Definition
COCOA-GBP-EURONEXT
COCOA-NYBOT <sup>1</sup>
COFFEE ARABICA-NYBOT <sup>1</sup>
COFFEE ROBUSTA-EURONEXT
CORN-CBOT
COTTON NO. 2-NYBOT <sup>1</sup>
FROZEN CONCENTRATED ORANGE JUICE NO. 1-NYBOT <sup>1</sup>
LEAN HOGS-CME
MILK-CLASS III-CME
MILK-CLASS IV-CME
SOYBEAN-CBOT
SOYBEAN MEAL-CBOT
SOYBEAN OIL-CBOT
SUGAR #11 (WORLD)-NYBOT <sup>1</sup>
WHEAT-CBOT
WHEAT HRM-KCBOT
WHITE SUGAR-EURONEXT

<sup>&</sup>lt;sup>1</sup> The New York Board of Trade (NYBOT) was renamed ICE Futures US in 2007.

### **Exchange Definitions**

The following Commodity Reference Prices are as defined in the Commodity Price Reference Framework in Sub-Annex A to the Commodity Definitions.

ISDA Definition					
Commodity	Relevant	<b>Relevant Unit</b>	Exchange	Currency	<b>Specified Price</b>
Reference	Commodity		_		
Price					
BUTTER-CME	Butter	Pound	CME Globex	USD 0.01	Settlement Price
CHEESE-CME	Cheese	Pound	CME Globex	USD 0.01	Settlement Price
CRUDE PALM	Crude Palm Oil	Metric Ton	CME Globex	USD 0.01	Settlement Price
OIL-CME					
DRY WHEY-	Dry Whey	Pound	CME Globex	USD 0.01	Settlement Price
CME					
HARD RED	Wheat	Bushel	Minneapolis	USD 0.01	Settlement Price
SPRING			Grain Exchange		
WHEAT-					
MGEX					
MILLING	Wheat	Tonne	EURONEXT	EUR 0.01	Settlement Price
WHEAT-			LIFFE		
EURONEXT					
NONFAT DRY	Non-Fat Dry	Pound	CME Globex	USD 0.01	Settlement Price
MILK-CME	Milk				
RAPESEED-	Rapeseed	Tonne	EURONEXT	EUR 0.01	Settlement Price
EURONEXT			LIFFE		

# Fixed for Floating Agricultural Swap Contracts

Terms and Con	ditions
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Summary:	This covers uncleared fixed-for-floating agricultural swaps ("Fixed for Floating Agricultural Swap Contracts").
Limitations on Available Selections and Default Settings:	<ul> <li>The terms under which Fixed for Floating Agricultural Swap Contracts may be traded are shown below and in the attached tables.</li> <li>For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</li> <li>In many cases there are normal "vanilla" terms on which the parties will transact.</li> <li>These are shown as "Default " and will apply unless the parties vary them.</li> </ul>
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards: 2005 ISDA Commodity Derivatives Definitions ("Commodity Definitions")
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Commodity
ISDA OTC Base Product:	Agricultural
ISDA OTC Settlement type:	Cash
Further Limitations:	None
Terms:	
Trade Date:	As agreed by the parties.
Effective Date:	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention.
Effective Date Business Days:	None, unless specified by the parties.
Effective Date Business Day Convention:	None, unless specified by the parties from among the Available Business Day Conventions.
Termination Date:	As specified by the parties.
Termination Date Business Days:	None, unless specified by the parties.
Termination Date Business Day Convention:	None, unless specified by the parties from among the Available Business Day Conventions.
Commodity:	As specified by the parties from among the Available Commodities.
Total Notional Quantity:	The sum of the Notional Quantities per Calculation Period.
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period Basis.
Calculation Periods:	As specified by the parties.
Calculation Period Business Days:	None, unless specified by the parties.
Calculation Period Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Payment Dates:	In relation to each Calculation Period, as specified by the parties, each such day being subject to adjustment in accordance with the Payment Date Business Day Convention.

Payment Date Business Days:	The Business Days specified for the relevant
	Commodity, plus any additional Business Days specified
	by the parties from among the Available Business Days.
Payment Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Fixed Amount:	
Fixed Price Payer:	As specified by the parties.
Fixed Price or Fixed Amount:	As specified by the parties per Unit of the Commodity or
	overall.
Floating Amount:	
Floating Price Payer:	As specified by the parties.
Applicable Spread:	As specified by the parties.
Commodity Reference Price:	As specified by the parties from among the Available
	Commodity Reference Prices.
Market Disruption:	
Market Disruption Events:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Additional Market Disruption Events:	As specified by the parties.
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Disruption Fallbacks:	Unless otherwise specified by the parties, per the
·	Commodity Definitions.
Fallback Reference Price:	None, unless specified by the parties.
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the
	Commodity Definitions.
Calculation Agent:	As agreed by the parties.

### Fixed-for-Floating Agricultural Swap Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY
EUR	Euro	EUTA
GBP	Sterling	GBLO

#### Fixed-for-Floating Agricultural Swap Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

Fixed-for-Floating Agricultural Swap Available Commodity Reference Prices

### **ISDA Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

ISDA Definition
COCOA-GBP-EURONEXT
COCOA-NYBOT <sup>1</sup>
COFFEE ARABICA-NYBOT <sup>1</sup>
COFFEE ROBUSTA-EURONEXT
CORN-CBOT
COTTON NO. 2-NYBOT <sup>1</sup>
FROZEN CONCENTRATED ORANGE JUICE NO. 1-NYBOT <sup>1</sup>
LEAN HOGS-CME
MILK-CLASS III-CME
MILK-CLASS IV-CME
SOYBEAN-CBOT
SOYBEAN MEAL-CBOT
SOYBEAN OIL-CBOT
SUGAR #11 (WORLD)-NYBOT <sup>1</sup>
WHEAT-CBOT
WHEAT HRM-KCBOT
WHITE SUGAR-EURONEXT

### **Exchange Definitions**

The following Commodity Reference Prices are as defined in the Commodity Price Reference Framework in Sub-Annex A to the Commodity Definitions.

ISDA Definition					
Commodity	Relevant	<b>Relevant Unit</b>	Exchange	Currency	Specified Price
Reference	Commodity				
Price					
BUTTER-CME	Butter	Pound	CME Globex	USD 0.01	Settlement Price
CHEESE-CME	Cheese	Pound	CME Globex	USD 0.01	Settlement Price
CRUDE PALM	Crude Palm Oil	Metric Ton	CME Globex	USD 0.01	Settlement Price
OIL-CME					
DRY WHEY-	Dry Whey	Pound	CME Globex	USD 0.01	Settlement Price
CME					
HARD RED	Wheat	Bushel	Minneapolis	USD 0.01	Settlement Price
SPRING			Grain Exchange		
WHEAT-					
MGEX					
MILLING	Wheat	Tonne	EURONEXT	EUR 0.01	Settlement Price
WHEAT-			LIFFE		
EURONEXT					
NONFAT DRY	Non-Fat Dry	Pound	CME Globex	USD 0.01	Settlement Price
MILK-CME	Milk				
RAPESEED-	Rapeseed	Tonne	EURONEXT	EUR 0.01	Settlement Price
EURONEXT			LIFFE		

<sup>&</sup>lt;sup>1</sup> The New York Board of Trade (NYBOT) was renamed ICE Futures US in 2007.

# **Fixed for Floating Interest Rate Swaps**

Summary:	This covers uncleared fixed for floating interest rate swaps ("Fixed for Floating Interest Rate Swap (Uncleared)").
Limitations on Available Selections and Default Settings:	The terms under which a Fixed for Floating Interest Rate Swap (Uncleared) contract may be traded are as specified in these terms and conditions or in the attached tables.
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made. For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.
	In some cases, the same contract might have different terms depending on the market in which it is traded (e.g., London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	<ul> <li>This contract description incorporates by reference the following industry standard documentation and standards:</li> <li>(a) 2006 ISDA Definitions</li> <li>(b) ISDA Settlement Matrix (if Optional Early Termination applies)</li> <li>(c) ISDA OTC Taxonomies</li> <li>(d) FpML Location Codes</li> </ul>
	For convenience, certain terms are mapped to their FpML 5.5 equivalent.

Product Type/ISDA OTC Taxonomy: ISDA OTC Asset Class:	Interest Rate
ISDA OTC Asset Class: ISDA OTC Base Product:	Interest Rate
ISDA OTC Sub-Product:	Fixed Floating
Further Limitations:	None
Terms:	None
Notional Amount ("notional"):	An amount in one of the Available Currencies (see
Notional Amount ( notional ).	below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties. The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Effective Date as a number of Business Days or Banking Days from the Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Termination Date ("terminationDate"): Termination Date Business Day Convention:	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Termination Date as a number of days, months or years from the Effective Date ("relativeTerminationDate"). As specified by the parties from among the Available Business Day Conventions.
Fixed Amount:	Business Day Conventions.
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Fixed Rate Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
Fixed Rate Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
Day Count Fraction:	As specified by the parties.
Period End Dates Business Days:	As specified by the parties from among the Available Business Days.
Period End Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
initial Floating Rate:	As specified by the parties.
Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
Designated Maturity ('indexTenor"):	As specified by the parties.
Linear Interpolation:	For the Calculation Periods specified by the parties.
Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation

	applies, as specified by the parties.		
Longer Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation		
	applies, as specified by the parties.		
Spread:	As specified by the parties.		
Day Count Fraction:	As specified by the parties.		
Reset Dates ("resetDate"):	As specified by the parties.		
Method of Averaging:	As specified by the parties.		
Compounding:	As specified by the parties.		
Compounding Dates:	In the event Compounding is selected, as selected by the		
	parties.		
Compounding Method (Compounding OR Flat	In the event Compounding is selected, as selected by the		
Compounding):	parties.		
Period End Dates Business Days:	As specified by the parties from among the Available Business Days.		
Period End Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.		
Payment Dates Business Days:	As specified by the parties from among the Available		
J J J T	Business Days, subject to any Required Business Days.		
Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.		
Reset Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.		
Reset Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.		
Mark-to-Market Currency Swap:			
Mark-to-Market Currency Swap:	As specified by the parties, if the Currency Amounts are in different Currencies.		
Variable Currency Payer:	As specified by the parties if the transaction is a Mark- to-Market Currency Swap.		
Constant Currency Payer:	As specified by the parties if the transaction is a Mark- to-Market Currency Swap.		
Currency Exchange Rate:	As specified by the parties if the transaction is a Mark- to-Market Currency Swap and ISDA MTM Matrix is not applicable.		
ISDA MTM Matrix:	As specified by the parties if the transaction is a Mark- to-Market Currency Swap.		
Initial Exchange:			
Initial Exchange Date:	As specified by the parties.		
Fixed Rate Payer Initial Exchange Amount:	As specified by the parties.		
Floating Payer Initial Exchange Amount:	As specified by the parties.		
Currency:	As specified from the parties from the Available Currencies.		
Interim Exchanges:			
Interim Exchange Dates:	As specified by the parties.		
Fixed Rate Payer Interim Exchange Amount:	As specified by the parties.		
Fixed Rate Payer Interim Exchange Amount:	As specified by the parties.		
Currency:	As specified from the parties from the Available Currencies.		
Final Exchange:			
Final Exchange Date:	As specified by the parties.		
Fixed Rate Payer Final Exchange Amount:	As specified by the parties.		
Fixed Payer Final Exchange Amount:	As specified by the parties.		
Currency:	As specified from the parties from the Available Currencies.		

<b>Optional Early Termination:</b>	
Optional Early Termination:	As specified by the parties.
Option Style:	As specified by the parties.
Optional Early Termination Date:	As specified by the parties.
Seller:	As specified by the parties if only one party can terminate.
Buyer:	As specified by the parties, if only one party can terminate.
Seller's Agent:	As specified by the parties, if only one party can terminate.
Business Days for Payments:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Exercise Business Days:	As specified by the parties.
<b>Optional Early Termination Procedure for Exercise:</b>	
Commencement Date:	As specified by the parties, if the Option Style is American.
Bermuda Option Exercise Dates:	As specified by the parties, if the Option Style is Bermuda.
Expiration Date:	As specified by the parties.
Expiration Time:	As specified by the parties.
Earliest Exercise Time:	As specified by the parties.
Latest Exercise Time:	As specified by the parties.
Exercise Business Day:	As specified by the parties.
Partial Exercise:	As specified by the parties, if Option Style is European.
Multiple Exercise:	As specified by the parties, if Option Style is American or Bermuda.
Minimum Notional Amount:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
Maximum Notional Amount:	As specified by the parties if Multiple Exercise is specified.
Integral Multiple:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
<b>Optional Early Termination Settlement Terms:</b>	
Cash Settlement:	As specified by the parties.
ISDA Settlement Matrix:	As specified by the parties, if Cash Settlement is applicable to a single currency Transaction.
ISDA Cross Currency Settlement Matrix:	As specified by the parties, if Cash Settlement is applicable to a cross currency Transaction whose currencies are listed as a "currency pair" in the Cross Currency Settlement Matrix.
Cash Settlement Valuation Time:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Valuation Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Valuation Business Days:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date Business Days Convention:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or

	"Cash Price—Alternate" apply, as specified by the
	parties from Available Cash Settlement Methods,
	directly or via the ISDA Settlement Matrix.
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield
	Curve—Adjusted," "Par Yield Curve—Unadjusted" or
	"Zero Coupon Curve—Adjusted" apply, as specified by
	the parties from Available Cash Settlement Methods,
	directly or via the ISDA Settlement Matrix parties from
	Available Cash Settlement Methods, directly or via the
	ISDA Settlement Matrix.
Cash Settlement Reference Banks:	As specified by the parties, if Settlement Rate is
	applicable.
Cash Settlement Reference Banks:	If Cash Settlement is applicable, as specified by the
	parties.
Quotation Rate:	If Cash Settlement is applicable, as specified by the
	parties from among the Available Quotation Rates.
Calculation Agent:	As agreed by the parties.

## Fixed Floating Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
BRL	Brazilian Reai	Any of BR{SP,RJ,BR} and not
		otherwise declared a market
		holiday by the BM&F
CAD	Canadian Dollar	САТО
CHF	Swiss Franc	CHZU
CLP	Chilean Peso	CLSA
CNH	Chinese Renminbi (HK)	HKHK and CNBE
CNY	Chinese Renminbi	CNBE
СОР	Colombian Peso	СОВО
CZK	Czech Koruna	CZPR
DKK	Danish Krone	DKCO
EUR	Euro	EUTA
GBP	Sterling	GBLO
HKD	Hong Kong Dollar	НКНК
HUF	Hungarian Forint	HUBU
ILS	Israeli Shekel	ILTA
INR	Indian Rupee	INMU
JPY	Japanese Yen	JPTO
KRW	Korean Won	KRSE
MXN	Mexican Peso (New)	MXMC
MYR	Malaysian Ringgit	MYKL
NOK	Norwegian Krone	NOOS
NZD	New Zealand Dollar	NZAU and NZWE
PHP	Phillipine Peso	PHMA
PLN	Polish Zloty	PLWA
RON	Romanian Leu	ROBU
RUB	Russian Ruble	RUMO
SAR	Saudi Arabian Riyal	SARI
SEK	Swedish Krona	SEST
SGD	Singapore Dollar	SGSI
THB	Thai Baht	THBA

TRY	Turkish Lira	TRIS
TWD	Taiwan Dollar	TWTA
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

#### Fixed Floating Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

### Fixed Floating Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

### Fixed Floating Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP	Plus Two Banking Days
CAD, GBP	Plus Zero

### Fixed Floating Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termination
	Date		Date	Date
N/A	N/A	N/A	N/A	N/A

#### Fixed Floating Notional Amounts

Currency	Minimum	Increment	Maximum	Default
AUD	25,000,000	100,000	N/A	N/A
BRL	5,000,000	100,000	N/A	N/A
CAD	25,000,000	1,000,000	N/A	N/A
CHF	5,000,000	100,000	N/A	N/A
CLP	5,000,000	100,000	N/A	N/A
CNH	5,000,000	100,000	N/A	N/A
CNY	5,000,000	100,000	N/A	N/A
COP	5,000,000	100,000	N/A	N/A
CZK	5,000,000	100,000	N/A	N/A
DKK	5,000,000	100,000	N/A	N/A
EUR	25,000,000	100,000	N/A	N/A
GBP	25,000,000	100,000	N/A	N/A
HKD	25,000,000	100,000	N/A	N/A
HUF	5,000,000	100,000	N/A	N/A
ILS	5,000,000	100,000	N/A	N/A

# Fixed for Floating Interest Rate Swaps

INR	5,000,000	100,000	N/A	N/A
JPY	2,500,000,000	100,000,000	N/A	N/A
KRW	5,000,000	100,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
MYR	5,000,000	100,000	N/A	N/A
NOK	5,000,000	100,000	N/A	N/A
NZD	5,000,000	100,000	N/A	N/A
PHP	5,000,000	100,000	N/A	N/A
PLN	5,000,000	100,000	N/A	N/A
RON	5,000,000	100,000	N/A	N/A
RUB	5,000,000	100,000	N/A	N/A
SAR	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
SGD	5,000,000	100,000	N/A	N/A
THB	5,000,000	100,000	N/A	N/A
TRY	5,000,000	100,000	N/A	N/A
TWD	5,000,000	100,000	N/A	N/A
USD	25,000,000	1,000,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

## Fixed Floating Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-AONIA-OIS- COMPOUND- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-AUBBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSW- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Quarterly Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Semi-annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-Annual Swap Rate-ICAP-	All quoted tenors	N/A	Per ISDA 2006	N

Reference Banks				
AUD-Swap Rate- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
BRL-CDI-CETIP	See below	N/A	See below	See below
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-CDOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-CORRA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-ISDD	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-ISDAFIX-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
CHF-TOIS-OIS-	All quoted tenors	N/A	Per ISDA 2006	Ν

COMPOUND				
CLP-CLICP-	A 11	<b>NT</b> / 4	D 10D 1 2007	N
Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CNH-HIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CNH-HIBOR-TMA	All quoted tenors	N/A	Per ISDA 2006	Ν
CNY- CNREPOFIX=CFXS- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CNY-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
CNY-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CNY-SHIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
COP-IBR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
CZK-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
CZK-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CZK-PRIBOR-PRBO	All quoted tenors	N/A	Per ISDA 2006	Ν
CZK-PRIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-CIBOR- DKNA13	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-CIBOR- DKNA13-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-CIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-CIBOR2- DKNA13	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-CITA-DKNA14- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
DKK-DKKOIS-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap	All quoted tenors	N/A	Per ISDA 2006	Ν

Rate-10:00- SwapMarker				
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-EURIBOR	All quoted tenors	N/A	Per ISDA 2006	N

Curra Data 11:00				
Swap Rate-11:00				
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TMM-CDC- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
GBP-Semi-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
GBP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
GBP-SONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
GBP-WMBA-RONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
GBP-WMBA-SONIA-	All quoted tenors	N/A	Per ISDA 2006	Ν

COMPOUND				
COMPOUND				
GRD-ATHIBOR- ATHIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
GRD-ATHIMID- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
GRD-ATHIMID- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HIBOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-HIBOR=	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HKAB	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-HKAB- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-HIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HONIX-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-ISDA-Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
HKD-ISDA-Swap Rate-4:00	All quoted tenors	N/A	Per ISDA 2006	N
HKD-Quarterly- Annual Swap Rate- 11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly- Annual Swap Rate- 4:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
HKD-Quarterly- Annual Swap Rate- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
HUF-BUBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
HUF-BUBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
ILS-TELBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
ILS-TELBOR01- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
INR-FBIL-MIBOR- OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N

JPY-BBSF-Bloomberg- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF-Bloomberg- 15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-ISDA-Swap Rate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR- FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL- TONAR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TONA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Telerate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
KRW-CD-3220	All quoted tenors	N/A	Per ISDA 2006	N

KRW-CD-KSDA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
MYR-KLIBOR-BNM	All quoted tenors	N/A	Per ISDA 2006	Ν
MYR-KLIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR-NIBR	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR-NIBR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NOK-NIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-BID	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-FRA	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-BBR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-NZIONA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
NZD-Swap Rate- ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PHP-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
PHP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PLN-WIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PLN-WIBOR-WIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
PLZ-WIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
PLZ-WIBOR-WIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
RON-RBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
RUB-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
RUB-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
RUB-MOSPRIME- NFEA	All quoted tenors	N/A	Per ISDA 2006	Ν
RUB-MOSPRIME-	All quoted tenors	N/A	Per ISDA 2006	Ν

Reference Banks				
SAR-SRIOR-Reference				
Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SAR-SRIOR-SUAA	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-SIOR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- VWAP-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
THB-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
THB-Semi-Annual Swap Rate-Reference	All quoted tenors	N/A	Per ISDA 2006	Ν

Banks         All quoted tenors         NA         Per ISDA 2006         N           THB-SOR-Returers         All quoted tenors         N/A         Per ISDA 2006         N           THB-SOR-Telerate         All quoted tenors         N/A         Per ISDA 2006         N           THB-SOR-Telerate         All quoted tenors         N/A         Per ISDA 2006         N           TRY-TRYIBOR- Returers         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Quarterly- Annual Swap Rate- Annual Swap Rate- Reference Banks         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Quarterly- Annual Swap Rate- Reference Banks         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Reference         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Reference         All quoted tenors         N/A         Per ISDA 2006         N           USD-Annual Swap Kate- Reference Banks         All quoted tenors         N/A         Per ISDA 2006         N           USD-Annual Swap Kate- Rate-11:00-         All quoted tenors         N/A         Per ISDA 2006         N           USD-BA-Reference         All quoted tenors         N/A         Per ISDA 2006         N           USD-DEA-	Banks				
THB-SOR-Telerate       All quoted tenors       N/A       Per ISDA 2006       N         THB-THBFTX-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         TRY-TRYIBOR- Reuters       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Quarterly- Annual Swap Rate.       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Quarterly- Annual Swap Rate.       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Quarterly- Annual Swap Rate.       All quoted tenors       N/A       Per ISDA 2006       N         Reference Banks       TWD-Reuters-6165       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Reuters-6165       All quoted tenors       N/A       Per ISDA 2006       N         TWD-TWCPBA       All quoted tenors       N/A       Per ISDA 2006       N         USD-Annual Swap       All quoted tenors       N/A       Per ISDA 2006       N         USD-Annual Swap       All quoted tenors       N/A       Per ISDA 2006       N         USD-Annual Swap       All quoted tenors       N/A       Per ISDA 2006       N         USD-Annel       All quoted tenors       N/A       Per ISDA 2006       N         USD-CH-L1	THB-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
THB-THBFIX-Reuters       All quoted tenors       N/A       Per ISDA 2006       N         TRY-TRYIBOR- Reuters       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Quarterly- Annual Swap Rate- Annual Swap Rate- Reference Banks       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Quarterly- Annual Swap Rate- Reference Banks       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Reference Dealers       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Reference Dealers       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Reference       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Telerate-6165       All quoted tenors       N/A       Per ISDA 2006       N         TWD-TWCPB4A       All quoted tenors       N/A       Per ISDA 2006       N         USD-Annual Swap Rate-11:00-       All quoted tenors       N/A       Per ISDA 2006       N         USD-BA-H.15       All quoted tenors       N/A       Per ISDA 2006       N         USD-CD-H.15       All quoted tenors       N/A       Per ISDA 2006       N         USD-CD-Reference Dealers       All quoted tenors       N/A       Per ISDA 2006       N <td>THB-SOR-Reuters</td> <td>All quoted tenors</td> <td>N/A</td> <td>Per ISDA 2006</td> <td>Ν</td>	THB-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-TRYIBOR- Reuters       All quoted tenors       N/A       Per ISDA 2006       N         Reuters       All quoted tenors       N/A       Per ISDA 2006       N         11:00-BOCANTOR       All quoted tenors       N/A       Per ISDA 2006       N         MUD-Quarterly- Annual Swap Rate- Annual Swap Rate- Bealers       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Reference Dealers       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Reference       All quoted tenors       N/A       Per ISDA 2006       N         TWD-To-Telerate-6165       All quoted tenors       N/A       Per ISDA 2006       N         TWD-TWD-TWD-Telerate-6165       All quoted tenors       N/A       Per ISDA 2006       N         USD-Annual Swap Rate-11:00-       All quoted tenors       N/A       Per ISDA 2006       N         USD-BA-H.15       All quoted tenors       N/A       Per ISDA 2006       N         USD-BA-H.15       All quoted tenors       N/A       Per ISDA 2006       N         USD-BA-Reference Dealers       All quoted tenors       N/A       Per ISDA 2006       N         USD-CD-Reference Banks-ICAP SwapPX       All quoted tenors       N/A       Per ISDA 2006       N         U	THB-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
Reuters         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Quarterly- Annual Swap Rate.         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Quarterly- Annual Swap Rate.         All quoted tenors         N/A         Per ISDA 2006         N           Reference Banks         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Reterence Dealers         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Reteres-6165         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Telerate-6165         All quoted tenors         N/A         Per ISDA 2006         N           TWD-Telerate-6165         All quoted tenors         N/A         Per ISDA 2006         N           USD-Annual Swap Rate-11:00-         All quoted tenors         N/A         Per ISDA 2006         N           USD-BA-H.15         All quoted tenors         N/A         Per ISDA 2006         N           USD-BA-Reference Dealers         All quoted tenors         N/A         Per ISDA 2006         N           USD-CD-H.15         All quoted tenors         N/A         Per ISDA 2006         N           USD-CD-Reference Banks-CAP SwapPX         All quoted tenors	THB-THBFIX-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
Annual Swap Rate-       All quoted tenors       N/A       Per ISDA 2006       N         11:00-BGCANTOR       All quoted tenors       N/A       Per ISDA 2006       N         Reference Banks       All quoted tenors       N/A       Per ISDA 2006       N         Dealers       All quoted tenors       N/A       Per ISDA 2006       N         TWD-Reuters-6165       All quoted tenors       N/A       Per ISDA 2006       N         TWD-TurcPlerate-6165       All quoted tenors       N/A       Per ISDA 2006       N         TWD-TwCPBA       All quoted tenors       N/A       Per ISDA 2006       N         TWD-TwCPBA       All quoted tenors       N/A       Per ISDA 2006       N         USD-Annual Swap       Rate-11:00-       All quoted tenors       N/A       Per ISDA 2006       N         USD-BA-H.15       All quoted tenors       N/A       Per ISDA 2006       N         USD-BA-Reference       All quoted tenors       N/A       Per ISDA 2006       N         USD-CD-H.15       All quoted tenors       N/A       Per ISDA 2006       N         USD-CD-Reference       All quoted tenors       N/A       Per ISDA 2006       N         USD-CMS-Reference       All quoted tenors       N/A	TRY-TRYIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	N
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USD-COF11-FHLBSFAll quoted tenorsN/APer ISDA 2006NUSD-COF11-ReutersAll quoted tenorsN/APer ISDA 2006NUSD-COF11-TelerateAll quoted tenorsN/APer ISDA 2006NUSD-CP-H.15All quoted tenorsN/APer ISDA 2006NUSD-CP-Reference DealersAll quoted tenorsN/APer ISDA 2006N	USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-ReutersAll quoted tenorsN/APer ISDA 2006NUSD-COF11-TelerateAll quoted tenorsN/APer ISDA 2006NUSD-CP-H.15All quoted tenorsN/APer ISDA 2006NUSD-CP-Reference DealersAll quoted tenorsN/APer ISDA 2006N	USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-TelerateAll quoted tenorsN/APer ISDA 2006NUSD-CP-H.15All quoted tenorsN/APer ISDA 2006NUSD-CP-Reference DealersAll quoted tenorsN/APer ISDA 2006N	USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-H.15All quoted tenorsN/APer ISDA 2006NUSD-CP-Reference DealersAll quoted tenorsN/APer ISDA 2006N	USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-Reference All quoted tenors N/A Per ISDA 2006 N Dealers	USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
Dealers All quoted tenors N/A Per ISDA 2006 N	USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds- All quoted tenors N/A Per ISDA 2006 N	USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
	USD-Federal Funds-	All quoted tenors	N/A	Per ISDA 2006	N

H.15				
USD-Federal Funds-	All quoted tenors	N/A	Per ISDA 2006	Ν
H.15-Bloomberg	in quoted tenors	11/11	1015042000	17
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-LON- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	N
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SOFR-	All quoted tenors	N/A	Prior to publication of a	No

COMPOUND			supplement to ISDA 2006 including USD- SOFR-COMPOUND, not applicable and thereafter, per ISDA 2006	
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL- Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate- T19901	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate- T500	All quoted tenors	N/A	Per ISDA 2006	N
VND-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
VND-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-DEPOSIT- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
ZAR-DEPOSIT- SAFEX	All quoted tenors	N/A	Per ISDA 2006	N
ZAR-JIBAR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
ZAR-JIBAR-SAFEX	All quoted tenors	N/A	Per ISDA 2006	N
ZAR-PRIME- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	N
ZAR-PRIME- AVERAGE-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Amount:	Notwithstanding anything to the contrary
	$1^{252/N}$
FX Rate × Currency Amount × $\prod_{j=1}^{N} \left(1 + \frac{Rele}{m}\right)$	$\left(\frac{evant Rate_j}{252}\right) - 1$
	Where:         N=number of Reset Dates in the Calculation Period         j=a particular Reset Date         Relevant Rate=the Relevant Rate for instance j of Reset Date
BRL-CDI-CETIP:	For any Reset Date, the Overnight Brazilian Interbank Deposit Rate Annualized, known as the average ("Media") of the DIOVER- EXTRA Group as published by CETIP ( <i>Câmara de</i> <i>Custódia e Liquidação</i> ) (the "Overnight CDI Rate") for such date; provided that (i) such rate is published not later than 12:00 p.m. on the Brazil Business Day next following such Reset Date and (ii) any adjustments made by CETIP to such rate at any time later than the end of the business day on such Reset Date shall not be taken into account. If for any Reset Date there is no published Overnight CDI Rate (including as a result of the proviso above), CDI for the relevant Reset Date will be the overnight deposit rate published for such date by the BM&F in accordance with its rules (see http://www.bmf.com.br/portal/pages/boletim1/bd_manual/indic a doreFinanceiros1.asp, or any successor page). If the BM&F does not publish such a rate for such date, CDI for the relevant Reset Date shall be determined jointly by the parties. If the parties do not agree on a determination of such rate within one Brazil Business Day following the relevant Reset Date, CDI shall be determined through a CDI Reference Dealer Poll as described herein. If CDI for a Reset Date is not so determined by a CDI Reference Dealer Poll, BRL-CDI-Reference Dealers shall apply.
BRL-CDI-Reference Dealers:	If applicable for a Reset Date as set forth above, the Calculation Agent shall conduct up to four dealer polls commencing on the Brazil Business Day following the relevant Reset Date, in each case by requesting each of the CDI Reference Dealers to provide a quotation of the CDI. If at least four such quotations are obtained from CDI Reference Dealers in any such poll, the highest and lowest quotations will be disregarded and CDI for the relevant Reset Date will equal the arithmetic mean of the remaining quotations. If fewer than four such quotations are obtained from a poll, the Calculation Agent shall conduct additional such polls until four such quotations are obtained in any poll; provided that the Calculation Agent shall not conduct more than four polls in the aggregate (with not more than two polls on any day and with such polls conducted over not more than two Brazil Business Days). If four quotations are not obtained from any of such four polls, CDI shall CDI shall not be determined by a CDI Reference Dealer Poll.

## Definition of BRL Floating Rate Option

CDI Reference Dealers:	At least six and not more than eight leading onshore dealers in the CDI market selected by the Calculation Agent.
Reset Dates ("resetDate"):	Each Scheduled Reset Date (as defined in the BRL CDI Best Practices).
Reset Dates Business Days:	As specified by the parties from among the Available BR Business Days.
Available BR Business Days:	Any of BR{SP,RJ, BR} and not otherwise declared a financial market holiday by the BM&F.

#### Definition of USD-SOFR-COMPOUND

From and after the date on which ISDA publishes a supplement to ISDA 2006 containing a definition of USD-SOFR-COMPOUND, per ISDA 2006

Prior to such date:

"USD-SOFR-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is SOFR). Upon the occurrence of a USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the rate (inclusive of any spreads or adjustments) formally designated, nominated or recommended as the replacement for SOFR by the Federal Reserve Board or a committee officially endorsed or convened by the Federal Reserve Board for purposes of designating, nominating or recommending a replacement for SOFR (which rate may be produced by the Federal Reserve Bank of New York or another administrator). If no such rate is formally designated, nominated or recommended within one U.S. Government Securities Business Day of the USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to OBFR. If at the time of the USD-SOFR-COMPOUND Index Cessation Event, publication of OBFR has been permanently or indefinitely discontinued, it has been publicly announced that OBFR will be permanently or indefinitely discontinued as of a specific date or there has been a public statement by a regulator or other official sector entity prohibiting the use of OBFR (which statement applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions), then the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the FOMC Target Rate.

"USD-SOFR-COMPOUND" will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{\text{SOFR}_i \times n_i}{360}\right) \cdot 1\right] \times \frac{360}{d}$$

where:

" $d_0$ ", for any Calculation Period, is the number of U.S. Government Securities Business Days in the relevant Calculation Period;

"i" is a series of whole numbers from one to  $d_0$ , each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant Calculation Period;

"SOFR" is the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website;

"SOFR<sub>i</sub>", for any day "i" in the relevant Calculation Period, is a reference rate equal to SOFR in respect of that day as published on or about 8:00 a.m., New York City time, on the U.S. Government Securities Business Day immediately following that day "i". If, by 5:00 p.m., New York City time, on the U.S. Government Securities Business Day immediately following any day "i", SOFR in respect of such day "i" has not been published and a USD-SOFR-COMPOUND Index Cessation Event has not occurred, then SOFR<sub>i</sub> for that day "i" will be SOFR as published in respect of the first preceding U.S. Government Securities Business Day for which SOFR was published on the Federal Reserve's Website;

"ni" is the number of calendar days in the relevant Calculation Period on which the rate is SOFRi;

"d" is the number of calendar days in the relevant Calculation Period;

"USD-SOFR-COMPOUND Index Cessation Event" means the occurrence of one or more of the following events:

- (d) a public statement by the Federal Reserve Bank of New York (or a successor administrator of SOFR) announcing that it has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR;
- (e) the publication of information which reasonably confirms that the Federal Reserve Bank of New York (or a successor administrator of SOFR) has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR; or
- (f) a public statement by a regulator or other official sector entity prohibiting the use of SOFR that applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions;

"USD-SOFR-COMPOUND Index Cessation Effective Date" means, in respect of a USD-SOFR-COMPOUND Index Cessation Event, the date on which the Federal Reserve Bank of New York (or a successor administrator of SOFR) ceases to publish SOFR or the date as of which SOFR may no longer be used; and

"OBFR" is the daily Overnight Bank Funding Rate as provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website.

"FOMC Target Rate" is the short-term interest rate target set by the Federal Open Markets Committee and published on the Federal Reserve's Website or, if the Federal Open Markets Committee does not target a single rate, the mid-point of the short-term interest rate target range set by the Federal Open Markets Committee and published on the Federal Reserve's Website (calculated as the arithmetic average of the upper bound of the target range, rounded, if necessary, in accordance with the method set forth in Section 8.1(c))

"Federal Reserve's Website" means the website of the Board of Governors of the Federal Reserve System at http://www.federalreserve.gov, or any Successor Source.

Variable	Requirement	Default
Effective Date Business Day		No Adjustment
Convention:		
Termination Date Business Day		No Adjustment
Convention:		
Period End Dates:		Payment Dates

#### Fixed Floating Requirements and Defaults (Excluding Optional Early Termination and Mandatory Early Termination)

Payment Date Business Day		Modified Following
Convention:		C
Linear Interpolation:		Applicable only to long or short stub periods
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation:		longer than the actual Calculation Period length
Compounding:		Inapplicable
Compounding Business Day Convention:	Same as Business Day Convention for Period End Dates	
Method of Averaging:	Weighted Average or Unweighted Average	Unweighted Average
Compounding Method:	Straight Compounding, Flat Compounding, Spread Exclusive Compounding	
ISDA MTM Matrix:		Applicable (to Mark-to-Market Cross Currency Swaps)
Initial Exchange Date:		Effective Date
Initial Exchange Date Business Day Convention:		Following
Interim Exchange Date Business Day Convention:		Modified Following
Final Exchange Date:		Termination Date
Final Exchange Date Business Day Convention:		Modified Following

### Fixed Floating Requirements and Defaults (Optional Early Termination and Mandatory Early Termination)

Setting	Requirement	Default
Optional Early Termination:		Inapplicable
Mandatory Early Termination:		Inapplicable
Option Style:	American, Bermuda, European	
Cash Settlement:	Required for Mandatory Early	Applicable (i.e., Transaction is not
	Termination	"torn up for no value")
Optional Early Termination Date:		Cash Settlement Payment Date
Optional Early Termination Date		Following
Business Day Convention:		
Mandatory Early Termination Date		Modified Following
Business Day Convention		

Fixed Floating Requirements and Defaults (Optional Early Termination—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day:		Banking Day for cash Settlement
		Currency (TARGET Settlement Day
		for EUR)
Latest Exercise Time:	On Expiration Date, the Expiration	Other than Expiration Date, the
	Time	Expiration Time

Fixed Floating Requirements and Defaults

(Cash	Settlement)
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Setting	Requirement/Choices	Default
Cash Settlement Amount:	•	
ISDA Cross Currency Settlement Matrix:		Applicable, if cross currency swap with currency pair included in Matrix
ISDA Settlement Matrix:		Applicable, if single currency swap with Currency included in Matrix
Cash Settlement Valuation Time:		
Cash Settlement Valuation Date:		Two Valuation Business Days before Mandatory/Optional Early Termination Date <b>but</b> same day for CAD, GBP or DKK with Floating Rate Option of "DKK-CIBOR- DKNA13" or "DKK-CIBOR- DKNA13-Bloomberg"
Valuation Business Day:		Banking Days in locations per the Business Day Location Table, plus additional days required by for fixings under the Floating Rate Option(s)
Cash Settlement Payment Date Business Day Convention:		Following
Cash Settlement Method:	Cash Price Cash Price—Alternate Method Collateralized Cash Price Par Yield Curve—Adjusted Par Yield Curve—Unadjusted Zero Coupon Yield—Adjusted	
Cash Settlement Currency:		For single currency, same as Notional Amount, otherwise as specified in ISDA Master Agreement, or otherwise same as Notional Amount for Fixed Amount
Settlement Rate:	ISDA Source/Other Price Source/Reference Banks	
Cash Settlement Reference Banks:		Fallbacks per ISDA 2006 Definitions
Quotation Rate:	bid ask mid Exercising Party Pays (Optional Early Termination Only)	

Summary:	This covers fixed for floating interest rate swaptions
TI 1/11 / 11 TA T / T T A T	("Fixed for Floating Interest Rate Swaptions").
Limitations on Available Selections and Default	The terms under which a Fixed for Floating Interest
Settings:	Rate Swaption may be traded are as specified in these
	terms and conditions and in the attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	For Business Days, the defaults shall be the locations
	specified for the relevant currency, any additional
	locations specified for the relevant Floating Rate
	Options.
	The parties may add additional locations from the
	Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made.
	For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on
	which the parties will transact.
	These are shown as "Default " and will apply unless the
	parties vary them.
	It should be noted that these contracts can be traded in a
	variety of currencies.
	Since each national market has its own peculiarities, the
	"Available Terms" and/or "Default Terms" may vary by
	currency.
	In some cases, the same contract might have different
	terms depending on the market in which it is traded
	(e.g., London versus NY).
	In that case the default settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions
	(b) ISDA Settlement Matrix (if Optional Early
	Termination applies)
	(c) ISDA OTC Taxonomies
	(d) FpML Location Codes
	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Fixed Floating
Further Limitations:	None
Terms:	
Terms of "Underlying Swap Transaction":	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see
	below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance

## **<u>Fixed for Floating Interest Rate Swaptions</u>** Terms and Conditions

	with any applicable Business Day Convention. The parties may express the unadjusted Effective Date
	as a number of Business Days or Banking Days from the
	Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Termination Date as a number of days, months or years from the Effective Date ("relativeTerminationDate").
Termination Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Fixed Amount:	
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Fixed Rate Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
Fixed Rate Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
Day Count Fraction:	As specified by the parties.
Period End Dates Business Days:	As specified by the parties from among the Available Business Days.
Period End Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
initial Floating Rate:	As specified by the parties.
Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
Designated Maturity ('indexTenor")	As specified by the parties.
Linear Interpolation:	For the Calculation Periods specified by the parties.
Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
Longer Designated Maturity for Linear Interpolation	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
Spread:	As specified by the parties.
Day Count Fraction:	As specified by the parties.
Reset Dates ("resetDate"):	As specified by the parties.
Method of Averaging:	As specified by the parties.
Compounding:	As specified by the parties.
Compounding Dates	In the event Compounding is selected, as selected by the

parties. In the event Compounding is selected, as selected by the parties. As specified by the parties from among the Available Business Days. As specified by the parties from among the Available Business Day Conventions	
As specified by the parties from among the Available Business Days. As specified by the parties from among the Available	
Business Days. As specified by the parties from among the Available	
As specified by the parties from among the Available Business Day Conventions.	
As specified by the parties from among the Available Business Days, subject to any Required Business Days.	
As specified by the parties from among the Available Business Day Conventions.	
As specified by the parties from among the Available Business Days, subject to any Required Business Days.	
As specified by the parties from among the Available Business Day Conventions.	
As specified by the parties.	
As specified by the parties from among the Available	
Business Days, subject to any Required Business Days.	
As specified by the parties.	
As specified by the parties.	
As specified by the parties, if the Option Style is American.	
As specified by the parties, if the Option Style is Bermuda.	
As specified by the parties.	
As specified by the parties, if Option Style is European.	
As specified by the parties, if Option Style is American or Bermuda.	
As specified by the parties if Partial Exercise or Multiple Exercise is specified.	
As specified by the parties if Multiple Exercise is specified.	
As specified by the parties if Partial Exercise or Multiple Exercise is specified.	
As specified by the parties.	
As specified by the parties if Automatic Exercise is specified.	
As specified by the parties (if required) .	
ris specifica by the parties (il required).	
As specified by the parties.	
As specified by the parties.	
As specified by the parties.	
As specified by the parties. As specified by the parties, if Cash Settlement is	

	applicable to a single currency Underlying Swap Transaction.
ISDA Cross Currency Settlement Matrix:	As specified by the parties, if Cash Settlement is applicable and the Underlying Swap Transaction is a cross-currency Transaction where the currency pair is included in the Matrix.
Cash Settlement Valuation Time:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Valuation Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Valuation Business Days:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date Business Days Convention:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or "Cash Price—Alternate" apply, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield Curve—Adjusted," "Par Yield Curve—Unadjusted" or "Zero Coupon Curve—Adjusted" apply, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Cash Settlement Reference Banks:	As specified by the parties, if Settlement Rate is applicable.
Cash Settlement Reference Banks:	If Cash Settlement is applicable, as specified by the parties.
Quotation Rate:	If Cash Settlement is applicable, as specified by the parties from among the Available Quotation Rates.
Calculation Agent:	As agreed by the parties.

Three Letter Currency Code	Currency Name (ISDA)	Basic Business Day Locations
(ISDA/ISO)		For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	CATO
CHF	Swiss Franc	CHZU
EUR	Euro	EUTA
GBP	Sterling	GBLO
ILS	Israeli Shekel	ILTA
JPY	Japanese Yen	JPTO
MXN	Mexican Peso (New)	MXMC
SAR	Saudi Arabian Riyal	SARI
SEK	Swedish Krona	SEST
SGD	Singapore Dollar	SGSI
TRY	Turkish Lira	TRIS
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

### Fixed Floating Swaptions Available Currencies and Required Business Days

Fixed Floating Swaptions Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

### Fixed Floating Swaptions Underlying Swap Transaction Available Day Count Fractions

ISDA Name	
1/1	
30/360, 360/360, Bond Basis	
Actual/360	
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F	
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)	
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)	

### Fixed Floating Swaptions Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP, MXN	Plus Two Banking Days
MXN	Plus One Banking Day
CAD, GBP	Plus Zero

### Fixed Floating Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termination
	Date		Date	Date
N/A	N/A	N/A	N/A	N/A

Currency	Minimum	Increment	Maximum	Default
AUD	25,000,000	100,000	N/A	N/A
CAD	5,000,000	100,000	N/A	N/A
CHF	10,000,000	1,000,000	N/A	N/A
EUR	25,000,000	100,000	N/A	N/A
GBP	25,000,000	100,000	N/A	N/A
ILS	5,000,000	100,000	N/A	N/A
JPY	2,500,000,000	100,000,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
SAR	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
SGD	5,000,000	100,000	N/A	N/A
TRY	5,000,000	100,000	N/A	N/A
USD	25,000,000	1,000,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

### Fixed Floating Swaptions Underlying Swap Transaction Notional Amounts

Fixed Floating Swaptions Underlying Swap Transaction Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-AONIA-OIS- COMPOUND- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-AUBBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSW- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Quarterly Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
AUD-Swap Rate-	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Reuters				
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-CDOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-TBILL- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR-BBA- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-CORRA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-ISDAFIX-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
CHF-TOIS-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Rate-10:00-Bloomberg				
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TMM-CDC- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-Reference	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Banks				
GBP-SONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-RONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
ILS-TELBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ILS-TELBOR01- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF-Bloomberg- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-BBSF-Bloomberg- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-ISDA-Swap Rate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR- FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL- TONAR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-TIBM (All Banks)-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
JPY-TIBOR-TIBM- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TONA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Reuters- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TSR-Telerate- 15:00	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	Ν
SAR-SRIOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SAR-SRIOR-SUAA	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-SIOR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-ICAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
SGD-SONAR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SONAR-OIS- VWAP-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP	All quoted tenors	N/A	Per ISDA 2006	Ν
SGD-SOR-VWAP- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-Annual Swap Rate-11:15- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-TRYIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
TRY-TRYIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-Reference	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Dealers				
USD-Federal Funds- H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-LON- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL- Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T500	All quoted tenors	N/A	Per ISDA 2006	Ν
VND-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
VND-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-DEPOSIT- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-DEPOSIT- SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-JIBAR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-JIBAR-SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-PRIME- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-PRIME- AVERAGE-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν

Fixed Floating Swaption Underlying Swap Transaction Requirements and Defaults

Variable	Requirement	Default
Effective Date Business Day		No Adjustment
Convention		-
Termination Date Business Day		No Adjustment

Convention		
Period End Dates		Payment Dates
Payment Date Business Day		Modified Following
Convention		
Linear Interpolation		Applicable only to long or short stub periods
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation		longer than the actual Calculation
		Period length
Compounding		Inapplicable
Compounding Business Day	Same as Business Day Convention	
Convention	for Period End Dates	
Method of Averaging	Weighted Average or Unweighted	Unweighted Average
	Average	
Compounding Method	Compounding or Flat Compounding	Compounding

### Fixed Floating Swaption Requirements and Defaults

Setting	Requirement	Default
Option Style:	American, Bermuda, European	
Premium Payment Date Business		Following
Day Convention		_

### Fixed Floating Swaption Requirements and Defaults (Swaption—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day		Banking Day for cash Settlement Currency (TARGET Settlement Day for EUR)
Latest Exercise Time	On Expiration Date, the Expiration Time	Other than Expiration Date, the Expiration Time
Automatic Exercise		
Threshold		

### Fixed Floating Swaption Requirements and Defaults (Swaption Cash Settlement)

Setting	Requirement/Choices	Default
Cash Settlement Amount		
ISDA Settlement Matrix		Applicable, if single currency swap with Currency included in Matrix
ISDA Cross Currency Settlement Matrix		Applicable, if cross currency swap with currency pair included in Matrix
Cash Settlement Valuation Time		
Cash Settlement Valuation Date		Two Valuation Business Days before Mandatory/Optional Early Termination Date <b>but</b> same day for CAD, GBP or DKK with Floating Rate Option of "DKK-CIBOR-

		DKNA13" or "DKK-CIBOR- DKNA13-Bloomberg"
Valuation Business Day		Banking Days in locations per the Business Day Location Table, plus additional days required by for fixings under the Floating Rate Option(s)
Cash Settlement Payment Date		Following
Business Day Convention		
Cash Settlement Method	Cash Price Cash Price—Alternate Method Collateralized Cash Price Par Yield Curve—Adjusted Par Yield Curve—Unadjusted Zero Coupon Yield—Adjusted	
Cash Settlement Currency		For single currency, same as Notional Amount, otherwise as specified in ISDA Master Agreement, or otherwise same as Notional Amount for Fixed Amount
Settlement Rate	ISDA Source/Other Price Source/Reference Banks	
Cash Settlement Reference Banks		Fallbacks per ISDA 2006 Definitions
Quotation Rate	bid ask mid	

# Forward Rate Agreements (Uncleared)

Summary:	This covers uncleared forward rate agreements ("Forward Rate Agreements" or "FRAs").
Limitations on Available Selections and Default Settings:	The terms under which an FRA may be traded are as specified in these terms and conditions and in the attached tables.
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made. For these purposes "TARGET"/EUTA is considered a location.
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.
	In some cases, the same contract might have different terms depending on the market in which it is traded ( <i>e.g.</i> , London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	These terms and conditions incorporate by reference the following industry standard documentation and standards: (a) 2006 ISDA Definitions (b) ISDA OTC Taxonomies (c) FpML Location Codes
	For convenience, certain terms are mapped to their FpML 5.2.4 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	FRA
ISDA OTC Sub-Product:	N/A
Further Limitations:	None

Terms:	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see
	below) agreed by the parties.
Effective Date ("adjustedEffectiveDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
Effective Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Termination Date ("adjustedTerminationDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
Termination Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Fixed Rate Payer ("buyerPartyReference"):	As specified by the parties.
Fixed Rate ("fixedRate"):	As specified by the parties.
Floating Rate Payer ("sellerPartyReference"):	As specified by the parties.
Payment Date ("paymentDate"):	As specified by the parties.
Floating Rate Option ("floatingIndex"):	As specified by the parties.
Designated Maturity ("indexTenor"):	As specified by the parties.
Spread:	As specified by the parties.
Floating Rate Day Count Fraction	As specified by the parties.
("dayCountFraction"):	
Reset Date:	The Effective Date.
Discounting ("fraDiscounting"):	As specified by the parties.
Business Days:	As specified by the parties.
Calculation Agent:	As specified by the parties.

## FRA Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	CATO
CHF	Swiss Franc	CHZU
CZK	Czech Koruna	CZPR
DKK	Danish Krone	DKCO
EUR	Euro	EUTA
GBP	Sterling	GBLO
HUF	Hungarian Forint	HUBU
ILS	Israeli Shekel	ILTA
JPY	Japanese Yen	JPTO
NOK	Norwegian Krone	NOOS
NZD	New Zealand Dollar	NZAU and NZWE
PLN	Polish Zloty	PLWA
SEK	Swedish Krona	SEST
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

### FRA Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding

## FRA Available Day Count Fractions

ISDA Name	
30/360, 360/360, Bond Basis	
Actual/360	
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F	
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)	
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)	
1/1	

### FRA Notional Amounts

Currency	Minimum	Increment	Maximum	Default
AUD	5,000,000	100,000	N/A	N/A
CAD	5,000,000	100,000	N/A	N/A
CHF	5,000,000	100,000	N/A	N/A
CZK	5,000,000	100,000	N/A	N/A
DKK	5,000,000	100,000	N/A	N/A
EUR	5,000,000	100,000	N/A	N/A
GBP	5,000,000	100,000	N/A	N/A
HUF	5,000,000	100,000	N/A	N/A
ILS	5,000,000	100,000	N/A	N/A
JPY	500,000,000	10,000,000	N/A	N/A
NOK	5,000,000	100,000	N/A	N/A
NZD	5,000,000	100,000	N/A	N/A
PLN	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
USD	10,000,000	1,000,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

## FRA Floating Rate Options and Defaults

Currency	Floating Rate Option (any from ISDA 2006 if not specified)	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations	Default for Currency (Y/N)
AUD				Actual/360	Ν	
CAD						
CHF						
CZK				Actual/360	Ν	
DKK						
EUR						
GBP						
HUF						
ILS	ILS- TELBOR01- Reuters	All quoted	Ν	Per ISDA 2006	Ν	Y
JPY						
NOK						
NZD	NZD-BBR- FRA	All quoted	Ν	Per ISDA 2006	Ν	Y
PLN						

SEK					
USD	USD-LIBOR-	3M	Actual/360	GBLO	Y
	BBA				
ZAR					

## FRA Discounting Types

ISDA Name	FpML	Default for (Currency)
FRA Discounting	ISDA	All but AUD
FRA Yield Discounting	AFMA	AUD
None	NONE	None

# Forward Rate Agreements - CME Cleared

Summary:	This covers forward rate agreements ("FRAs") cleared by the Chicago Mercantile Exchange Inc. ("CME")
Limitations on Available Selections and Default	by the Chicago Mercantile Exchange Inc. ("CME").The terms under which a Forward Rate
Settings:	Agreement/CME Cleared may be traded are as specified
	in these terms and conditions, which incorporate the
	CME Rulebook, in particular Chapters 900 and 901
	(and any successor provisions) and the CME Cleared
	IRS Product Scope (or any successor).
	By electing to trade a Forward Rate
	Agreement/CME Cleared, participants are
	representing that they are familiar with the CME Rulebook and the limitations on transaction terms
	contained in it.
Incornerated Standards	This contract description incorporates by reference the
Incorporated Standards:	CME Rulebook as in effect from time to time.
	The CME Rulebook as in cheet noin time to time.
	additional standards, such as the 2006 ISDA
	Definitions.
	Be aware that the timing of effectiveness of
	amendments or supplements to the ISDA standards
	may vary between bilateral and CME contracts,
	since the CME may reserve the right to select when
	and how such changes become effective.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	FRA
ISDA OTC Sub-Product(s):	N/A
Further Limitations:	Must comply with CME Clearing Requirements.
Terms:	
Definition Set:	The definition set (e.g., ISDA 2000/ISDA2006) elected
	by, or otherwise binding on, the parties in accordance with the CME Rulebook.
Effective Date:	As per the CME Rulebook.
Notional Amount:	An amount in Currency determined by the parties
	subject to the limitations in the CME Rulebook.
	This may vary from period to period to the extent
	permitted by the CME Rulebook.
	The CME Rulebook may limit the Currencies and
	Floating Rate Options for which variable notionals are
Common and	permitted.
Currency:	One of the currencies permitted for the relevant
Business Days:	transaction type per the CME Rulebook.As per the CME Rulebook, which may require certain
Dusiness Days.	Business Days be applicable on a per Currency or
	Floating Rate Option Basis and may otherwise limit the
	available Business Day locations which can be elected.
Business Day Convention:	As per the CME Rulebook.
Trade Date:	As per the CME Rulebook.
Settlement:	As per the CME Rulebook, in advance or arrears.
Termination Date:	As agreed by the parties, subject to any minimum or
remnation Date.	maximum tenor in the CME Rulebook.

Termination Date Business Day Convention:	As per the CME Rulebook, and thus subject to
-	limitations based on other terms of the transaction.
Fixed Rate Payer Payment Dates:	As per the CME Rulebook.
Fixed Amount:	As per the CME Rulebook, which may permit use of a
	schedule.
Fixed Rate:	As agreed by the parties, subject to any minimum or
	maximum rate and per-period variability permitted in
	the CME Rulebook.
Floating Rate Payer Payment Dates:	As per the CME Rulebook.
Floating Amount:	As per the CME Rulebook.
Floating Rate Option:	As determined by the parties, subject to the CME
	Rulebook, which may provide a more limited list of
	available options for a Currency than does the
	Definition Set
Designated Maturity:	As per the CME Rulebook, which may provide a more
	limited set of Designated Maturities than does the
	related rate source page.
Spread:	Subject to any minimum or maximum rate and per-
	period variability permitted by the CME Rulebook.
Reset Dates:	As the per CME Rulebook.
Floating Rate Daycount Fraction:	As per the CME Rulebook.
FRA Discounting:	As per CME Rulebook, which may require different
	discounting conventions depending on payment
	convention.
Fixed Rate Payer:	As determined by the parties.
Floating Rate Payer:	As determined by the parties.
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitations in
	the CME Rulebook.
Additional Payment/Fees:	As determined by the parties, subject to limitations in
	the CME Rulebook.
Payment Date for Additional Payment/Fees:	As determined by the parties, subject to limitations in
	the CME Rulebook.

# Forward Rate Agreements - LCH Cleared

Summary:	This covers forward rate agreements ("FRAs") cleared by LCH.Clearnet ("LCH").			
Limitations on Available Selections and Default Settings:	The terms under which a Forward Rate Agreement/LCH Cleared may be traded are as specified in these terms and conditions, which incorporate the			
	LCH Rulebook, in particular Schedule 4A (or any			
	successor provisions). By electing to trade a Forward Rate			
	Agreement/LCH Cleared, participants are			
	representing that they are familiar with the LCH			
	Rulebook and the limitations on transaction terms contained in it.			
Incorporated Standards:	This contract description incorporates by reference the LCH Rulebook as in effect from time to time.			
	The LCH Rulebook itself may incorporate certain			
	additional standards, such as the 2000 ISDA Definitions			
	and 2006 ISDA Definitions.			
	Be aware that the timing of effectiveness of			
	amendments or supplements to the ISDA standards may vary between bilateral and LCH contracts,			
	since the LCH may reserve the right to select when			
	and how such changes become effective.			
Product Type/ISDA OTC Taxonomy:				
ISDA OTC Asset Class:	Interest Rate			
ISDA OTC Base Product:	FRA			
ISDA OTC Sub-Product:	N/A			
Further Limitations:	Must comply with LCH Clearing Requirements.			
Terms:				
Definition Set:	The definition set (e.g., ISDA 2000/ISDA2006) elected			
	by, or otherwise binding on, the parties in accordance			
Notional Amount:	with the LCH Rulebook.           An amount in Currency determined by the parties			
Notional Amount.	subject to limitations in the LCH Rulebook.			
	This may vary from period to period to the extent			
	permitted by the LCH Rulebook.			
	The LCH Rulebook may limit the Currencies and			
	Floating Rate Options for which variable notionals are			
	permitted.			
Currency:	One of the currencies permitted for the relevant			
<b>T</b> 1 <b>D</b>	transaction type per the LCH Rulebook.			
Trade Date: Effective Date:	As per the LCH Rulebook.			
Termination Date:	As per the LCH Rulebook. As agreed by the parties, subject to any minimum or			
	maximum tenor in the LCH Rulebook.			
Payer for Additional Payment/Fees:	As determined by the parties, subject to the limitation in			
	the LCH Rulebook.			
Additional Payment/Fees:	As determined by the parties, subject to the limitation in			
·	the LCH Rulebook.			
Payment Date for Additional Payment/Fees	As determined by the parties, subject to limitations in			
	the LCH Rulebook, which may limit the earliest or			
	latest day on which such fees may be paid based on			

	Currency or other factors.			
Business Days:	As per the LCH Rulebook, which may require certain			
	Business Days be applicable on a per Currency or			
	Floating Rate Option Basis and may otherwise limit the			
	available Business Day locations which can be elected.			
Business Day Convention:	As per the LCH Rulebook.			
Fixed Rate Payer:	As determined by the parties.			
Fixed Rate Payer Payment Dates:	As per the LCH Rulebook.			
Fixed Amount:	As per the LCH Rulebook, which may permit use of a schedule.			
Fixed Rate:	As agreed by the parties, subject to any minimum or			
	maximum rate and per-period variability permitted in			
	the LCH Rulebook.			
Floating Rate Payer:	As determined by the parties.			
Floating Rate Payer Payment Dates:	As per the LCH Rulebook.			
Floating Amount:	As per the LCH Rulebook.			
Floating Rate Option:	As determined by the parties, subject to the LCH			
	Rulebook, which may provide a more limited list of			
	available options for a Currency than does the			
	Definition Set.			
Designated Maturity:	As per the LCH Rulebook, which may provide a more			
	limited set of Designated Maturities than does the			
	related rate source page.			
Spread:	Subject to any minimum or maximum rate and per-			
	period variability permitted by the LCH Rulebook.			
Reset Dates:	As the per LCH Rulebook.			
Floating Rate Daycount Fraction:	As per the LCH Rulebook.			
FRA Discounting:	As per the LCH Rulebook.			
Discount Rate	As per the LCH Rulebook.			
FRA Yield Discounting:	As per the LCH Rulebook.			
Negative Interest Rates:	As per the LCH Rulebook, which may require use of a			
	single method.			
Withholding and Tax:	As per the LCH Rulebook.			
Governing Law:	As per the LCH Rulebook, which may dictate the law			
	applicable to the Transaction.			

# iBoxx Index Swaps

Summary:	This covers iBoxx index swaps (each, an "iBoxx Index Swap") on a bilateral basis.				
Limitations on Available Selections and Default Settings:	The terms under which an iBoxx Index Swap may be traded are shown below and in the attached tables.				
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.				
	For Business Days, the defaults shall be the locations specified for the relevant currency and any additional locations specified for the relevant Floating Rate Options.				
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made.				
	For these purposes "TARGET" is considered a location.				
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.				
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.				
	In some cases, the same contract might have different terms depending on the market in which it is traded ( <i>e.g.</i> , London versus NY). In that case the default settings may vary by market.				
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards:				
	<ul> <li>(a) 2006 ISDA Definitions</li> <li>(b) the iBoxx Index Transaction Standard Terms Supplement (current version or as specified by the parties) ("iBoxx STS")</li> <li>For convenience, certain terms are mapped to their</li> </ul>				
Due due 4 Trume /ISD & OTC Terror emu	FpML 5.5 equivalent.				
Product Type/ISDA OTC Taxonomy: ISDA OTC Asset Class:	Credit				
ISDA OTC Asset Class. ISDA OTC Base Product:	Total Return Swap Index				
ISDA OTC Sub-Product:	iBoxx				
ISDA OTC Transaction type:	N/A				

Further Limitations:	None
Terms:	
Trade Date:	As agreed by the parties.
Effective Date ("effectiveDate"):	The Business Day following the Trade Date, unless
	otherwise agreed by the parties.
Effective Date Business Days:	The Business Days specified below, unless otherwise
5	specified by the parties.
Effective Date Business Day Convention:	The Business Day Convention specified below, unless
····	otherwise specified by the parties.
Termination Date ("terminationDate"):	As specified in the iBoxx STS, unless otherwise agreed
Termination Date ( terminationDate ).	by the parties.
Notional Amount ("notional"):	An amount specified by the parties, which will be in the
rononal / mount ( nononal ).	relevant Settlement Currency (unless otherwise agreed
	by the parties).
Index	As specified by the parties from among the Available
mdex	Indices.
Index Durrent	
Index Buyer:	As agreed by the parties.
Index Seller:	As agreed by the parties.
Calculation Agent:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.
Settlement Currency:	The currency in which the Index is denominated.
Business Days:	As specified in the iBoxx STS for the relevant
	Settlement Currency, unless otherwise agreed by the
	parties.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	Index Buyer
Floating Rate Payer Period End Dates:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties
Floating Rate Payer Payment Dates:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties
Linear Interpolation:	As specified in the iBoxx STS, unless otherwise agreed
F	by the parties
Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation
	applies, per the Definitions unless otherwise agreed by
	the parties.
Longer Designated Maturity for Linear Interpolation	For a Calculation Period to which Linear Interpolation
Longer Designated Waturity for Elitear Interpolation	For a Calculation I chou to which Effeat interpolation
	applies per the Definitions unless otherwise agreed by
	applies per the Definitions unless otherwise agreed by
Electing Data Option	the parties.
Floating Rate Option:	the parties. As specified by the parties.
Floating Rate for the initial Calculation Period	the parties.As specified by the parties.As specified by the parties.
Floating Rate for the initial Calculation Period Spread:	the parties.As specified by the parties.As specified by the parties.As specified by the parties.
Floating Rate for the initial Calculation Period	the parties.As specified by the parties.As specified by the parties.As specified by the parties.As specified in the iBoxx STS, unless otherwise agreed
Floating Rate for the initial Calculation Period Spread: Designated Maturity ("indexTenor")	the parties. As specified by the parties. As specified by the parties. As specified by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties.
Floating Rate for the initial Calculation Period Spread:	the parties.As specified by the parties.As specified by the parties.As specified by the parties.As specified in the iBoxx STS, unless otherwise agreedby the parties.As specified in the iBoxx STS, unless otherwise agreed
Floating Rate for the initial Calculation Period Spread: Designated Maturity ("indexTenor") Floating Rate Day Count Fraction:	the parties. As specified by the parties. As specified by the parties. As specified by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties.
Floating Rate for the initial Calculation Period Spread: Designated Maturity ("indexTenor")	the parties. As specified by the parties. As specified by the parties. As specified by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed
Floating Rate for the initial Calculation Period Spread: Designated Maturity ("indexTenor") Floating Rate Day Count Fraction:	<ul> <li>the parties.</li> <li>As specified by the parties.</li> <li>As specified by the parties.</li> <li>As specified by the parties.</li> <li>As specified in the iBoxx STS, unless otherwise agreed by the parties.</li> <li>As specified in the iBoxx STS, unless otherwise agreed by the parties.</li> </ul>
Floating Rate for the initial Calculation Period Spread: Designated Maturity ("indexTenor") Floating Rate Day Count Fraction:	the parties. As specified by the parties. As specified by the parties. As specified by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed
Floating Rate for the initial Calculation Period Spread: Designated Maturity ("indexTenor") Floating Rate Day Count Fraction: Reset Dates ("resetDate"):	the parties. As specified by the parties. As specified by the parties. As specified by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. The Business Days specified above, unless otherwise
Floating Rate for the initial Calculation Period         Spread:         Designated Maturity ("indexTenor")         Floating Rate Day Count Fraction:         Reset Dates ("resetDate"):         Payment Dates Business Days:	the parties. As specified by the parties. As specified by the parties. As specified by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. The Business Days specified above, unless otherwise agreed by the parties.
Floating Rate for the initial Calculation Period Spread: Designated Maturity ("indexTenor") Floating Rate Day Count Fraction: Reset Dates ("resetDate"):	<ul> <li>the parties.</li> <li>As specified by the parties.</li> <li>As specified by the parties.</li> <li>As specified by the parties.</li> <li>As specified in the iBoxx STS, unless otherwise agreed by the parties.</li> <li>As specified in the iBoxx STS, unless otherwise agreed by the parties.</li> <li>As specified in the iBoxx STS, unless otherwise agreed by the parties.</li> <li>As specified in the iBoxx STS, unless otherwise agreed by the parties.</li> <li>The Business Days specified above, unless otherwise agreed by the parties.</li> <li>The Business Days specified above, unless otherwise</li> </ul>
Floating Rate for the initial Calculation Period         Spread:         Designated Maturity ("indexTenor")         Floating Rate Day Count Fraction:         Reset Dates ("resetDate"):         Payment Dates Business Days:	the parties. As specified by the parties. As specified by the parties. As specified by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. As specified in the iBoxx STS, unless otherwise agreed by the parties. The Business Days specified above, unless otherwise agreed by the parties.

Index Return Amount:	
Index Return Amount Payment Date:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.
Initial Fixing Amount:	As agreed by the parties and rounded as specified in the
	iBoxx STS (unless the parties otherwise agree).
Final Fixing Amount:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.
Scheduled Final Fixing Date:	As specified by the parties, subject to the Business Day
	Convention (unless the parties otherwise agree).
Final Fixing Date:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.
Index Adjustment and Index Discontinuance Events:	As specified in the iBoxx STS, unless otherwise agreed
	by the parties.

### iBoxx Index Available Currencies and Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
EUR	Euro	EUTA and GBLO
GBP	Sterling	EUTA and GBLO
USD	United States Dollars	USNY

### iBoxx Index Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

#### iBoxx Index Available Indices

Name	Currency	
iBoxx EUR Corporates	EUR	
iBoxx EUR Liquid High Yield Index	EUR	
iBoxx GBP Corporates	GBP	
iBoxx USD Domestic Corporates	USD	
iBoxx USD Liquid High Yield Index	USD	
iBoxx USD Liquid Investment Grade Index	USD	
iBoxx USD Liquid Leveraged Loans Index	USD	

# iBoxx Index Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν

## iBoxx Index Floating Rate Options and Defaults

USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-LON- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL- Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T500	All quoted tenors	N/A	Per ISDA 2006	N

EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν

EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TMM-CDC- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-Semi-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν

GBP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-SONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-RONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-WMBA-SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν

# Inflation Swaps

Summary:	This covers inflation swaps ("Inflation Swaps").
Limitations on Available Selections and Default	The terms under which an Inflation Swap may be traded
Settings:	are as specified in these terms and conditions or in the
	attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	For Business Days, the defaults shall be the locations
	specified for the relevant currency, any additional
	locations specified for the relevant Floating Rate
	Options. The parties may add additional locations from the
	Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made. For these
	purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on
	which the parties will transact. These are shown as
	"Default" and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a
	variety of currencies. Since each national market has its
	own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.
	In some cases, the same contract might have different
	terms depending on the market in which it is traded
	(e.g., London versus NY). In that case the default
	settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions (b) 2008 ISDA Inflation Definitions
	(b) 2008 ISDA Inflation Derivatives Definitions, including Supplements 1 and 2 thereto and any other
	Supplements through Trade Date
	(c) ISDA OTC Taxonomies
	(d) FpML Location Codes
	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Inflation
Further Limitations:	None
Terms: National Amount ("national"):	An amount in one of the Assolution Comparison (
Notional Amount ("notional"):	An amount in one of the Available Currencies (see below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance
Encurve Date ( enectiveDate ):	The date specified by the parties, adjusted in accordance

	with any applicable Business Day Convention.	
	The parties may express the unadjusted Effective Date	
	as a number of Business Days or Banking Days from the	
	Trade Date ("relativeEffectiveDate").	
Effective Date Business Days:	As specified by the parties from among the Available Business Days.	
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.	
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Termination Date as a number of days, months or years from the Effective Date ("relativeTerminationDate").	
Termination Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.	
Fixed Amount:		
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.	
Fixed Amount:	As specified by the parties (in lieu of all items other than Payment Date(s)).	
Fixed Rate Payment Date ("unadjustedPaymentDate"):	As specified by the parties.	
Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.	
Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.	
Floating Amount:		
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.	
Currency Amount ("notionalAmount"):	As specified by the parties.	
Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.	
first Period End Date:	As specified by the parties if there is a short initial Calculation Period.	
Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.	
initial Floating Rate:	As specified by the parties.	
Floating Rate ("floatingRate"):	Notwithstanding the 2006 Definitions, "Floating Rate" will equal:	
	Index_Final - 1	
	Index_Initial - 1	
	rounded in accordance with the 2008 ISDA Inflation Derivatives Definitions and subject to the Negative Interest Rate Treatment.	
Index:	As specified by the parties from among the Available Inflation Indices.	
Index_Initial ("initialIndexLevel"):	As specified by the parties.	
Index_Final:	The Index level for the Reference Month(s) specified by the parties in the Reference Year(s) specified by the parties.	
Reference Month(s):	As specified by the parties.	
Reference Year(s)	As specified by the parties.	
Day Count Fraction:	1/1	
Reset Dates ("resetDate"):	As specified by the parties.	
Method of Averaging:	As specified by the parties.	
Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.	

Payment Dates Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Negative Interest Rates	As selected by the parties from among the Available
("negativeInterestRateMethod"):	Treatments.
Related Bond:	The bond, if any, specified by the parties as such.
Fallback Bond ("fallbackBondApplicable"):	As selected by the parties if no Related Bond is selected.
Calculation Agent:	As agreed by the parties.

### Fixed Floating Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
EUR	Euro	EUTA
GBP	Sterling	GBLO
ILS	Israeli Shekel	ILTA
USD	United States Dollars	USNY

### Fixed Floating Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

### Fixed Floating Available Day Count Fractions

	ISDA Name	
1/1		

### Fixed Floating Default Effective Dates

Currency	Default Effective Date	
All Currencies Other than CAD, GBP	Plus Two Banking Days	
CAD, GBP	Plus Zero	

### Fixed Floating Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termination
	Date		Date	Date
N/A	N/A	N/A	N/A	N/A

#### Fixed Floating Notional Amounts

Currency	Minimum	Increment	Maximum	Default
EUR	5,000,000	100,000	N/A	N/A
GBP	5,000,000	100,000	N/A	N/A
USD	10,000,000	1,000,000	N/A	N/A

Inflation Swap Indices

Index Name	Description
AUD-CPI	Australia: AUD – Non-revised Consumer Price Index (CPI)
AUS-CPI	Austria: AUS – Non-revised Consumer Price Index (CPI)
AUS-HICP	Austria: AUS – Non-revised Harmonised Indices of Consumer Prices (HICP)
BLG-CPI-GI	Belgium: BLG – Non-revised Consumer Price Index - General Index (CPI)
BLG-CPI-HI	Belgium: BLG – Non-revised Consumer Price Index - Health Index (CPI)
BLG-HICP	Belgium: BLG – Non-revised Harmonised Consumer Price Index (HICP)
DEM-CPI	Germany: DEM – Non-revised Consumer Price Index (CPI)
DEM-CPI-NRW	Germany: DEM – Non-revised Consumer Price Index for North Rhine-Westphalia
DEM-HICP	Germany: DEM – Non-revised Harmonised Consumer Price Index (HICP)
ESP-CPI	Spain: ESP – National-Non-revised Consumer Price Index (CPI)
ESP-HICP	Spain: ESP – Harmonised-Non-revised Consumer Price Index (HICP)
ESP-R-CPI	Spain: ESP – National-Revised Consumer Price Index (CPI).
ESP-R-HICP	Spain: ESP – Harmonised-Revised Consumer Price Index (HICP)
EUR-AI-CPI	European Union: EUR – All Items-Non-revised Consumer Price Index
EUR-AI-R-CPI	European Union: EUR – All Items–Revised Consumer Price Index
EUR-EXT-CPI	European Union: EUR – Excluding Tobacco-Non-revised Consumer Price Index
EUR-EXT-R- CPI	European Union: EUR – Excluding Tobacco–Revised Consumer Price Index
FRC-EXT-CPI	France: FRC – Excluding Tobacco-Non-Revised Consumer Price Index
FRC-HICP	France: FRC – Harmonised-Non-revised Consumer Price Index (HICP)
GRD-CPI	Greece: GRD – Non-revised Consumer Price Index (CPI)
GRD-HICP	Greece: GRD – Harmonised-Non-revised Consumer Price Index (HICP)
ILS-CPI	Israel: ILS – Non-revised Consumer Price Index (CPI)
IRL-CPI	Ireland: IRL – Non-revised Consumer Price Index (CPI)
IRL-HICP	Ireland: IRL – Harmonised-Non-revised Consumer Price Index (HICP)
ITL-BC-EXT-	Italy: ITL – Inflation for Blue Collar Workers and Employees–Excluding Tobacco Consumer

СРІ	Price Index			
ITL-BC-INT- CPI	Italy: ITL – Inflation for Blue Collar Workers and Employees-Including Tobacco Consumer Price Index			
ITL-HICP	Italy: ITL – Non-revised Harmonised Consumer Price Index (HICP)			
ITL-WC-EXT- CPI	Italy: ITL – Whole Community –Excluding Tobacco Consumer Price Index			
ITL-WC-INT- CPI	Italy: ITL – Whole Community –Including Tobacco Consumer Price Index			
LUX-CPI	Luxembourg: LUX – Non-revised Consumer Price Index (CPI)			
LUX-HICP	Luxembourg: LUX – Harmonised-Non-revised Consumer Price Index (HICP)			
NLG-CPI	Netherlands: NLG – Non-revised Consumer Price Index (CPI)			
NLG-HICP	Netherlands: NLG – Harmonised-Non-revised Consumer Price Index (HICP)			
POR-CPI	Portugal: POR – Non-revised Consumer Price Index (CPI)			
POR-HICP	Portugal: POR – Harmonised-Non-revised Consumer Price Index (HICP)			
UK-HICP	United Kingdom: GBP – Harmonised-Non-revised Consumer Price Index (HICP)			
UK-RPI	United Kingdom: GBP – Non-revised Retail Price Index (UKRPI)			
UK-RPIX	United Kingdom: GBP – Non-revised Retail Price Index Excluding Mortgage Interest Payments (UKRPIX)			
USA-CPI-U	United States: USA – Non-revised Consumer Price Index – Urban (CPI-U)			

### Fixed Floating Requirements and Defaults (Excluding Optional Early Termination and Mandatory Early Termination)

Variable	Requirement	Default
Fallback Bond:		Applicable

# **Interest Rate Caps/Floors**

Summary:	This covers interest rate caps and floors ("Interest Rate Caps/Floors").		
Limitations on Available Selections and Default Settings:	Caps/Floors").The terms under which an Interest Rate Cap/Floor may be traded are as specified in these terms and conditions and in the attached tables.For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even 		
Incorporated Standards:	<ul> <li>settings may vary by market.</li> <li>This contract description incorporates by reference the following industry standard documentation and standards: <ul> <li>(a) 2006 ISDA Definitions</li> <li>(b) ISDA Settlement Matrix (if Optional Early Termination applies)</li> <li>(c) ISDA OTC Taxonomies</li> <li>(d) FpML Location Codes</li> <li>For convenience, certain terms are mapped to their</li> <li>FpML 5.5 equivalent.</li> </ul> </li> </ul>		
Product Type/ISDA OTC Taxonomy:			
ISDA OTC Asset Class:	Interest Rate		
ISDA OTC Base Product:	IR Swap		
ISDA OTC Sub-Product:	Cap/Floor		
Further Limitations:	None		
Terms:			
Notional Amount ("notional"):	An amount in one of the Available Currencies (see below) agreed by the parties.		
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Effective Date		

	as a number of Business Days or Banking Days from the		
	Trade Date ("relativeEffectiveDate").		
Effective Date Business Days:	As specified by the parties from among the Available		
	Business Days.		
Effective Date Business Day Convention:	As specified by the parties from among the Available		
	Business Day Conventions.		
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance		
	with any applicable Business Day Convention.		
	The parties may express the unadjusted Termination		
	Date as a number of days, months or years from the		
	Effective Date ("relativeTerminationDate").		
Termination Date Business Day Convention:	As specified by the parties from among the Available		
	Business Day Conventions.		
Fixed Amount 1:			
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.		
Currency Amount ("notionalAmount"):	As specified by the parties.		
Fixed Rate Period End Dates ("unadjustedCalculation	As specified by the parties.		
Period Date"):			
first Period End Date:	As specified by the parties if there is a short initial		
	Calculation Period.		
Fixed Rate Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.		
Day Count Fraction:	As specified by the parties.		
Reset Dates ("resetDate"):	As specified by the parties.		
Period End Dates Business Days:	As specified by the parties from among the Available		
	Business Days.		
Period End Dates Business Day Convention:	As specified by the parties from among the Available		
	Business Day Conventions.		
Payment Dates Business Days:	As specified by the parties from among the Available		
	Business Days, subject to any Required Business Days.		
Payment Dates Business Day Convention:	As specified by the parties from among the Available		
	Business Day Conventions.		
Floating Amount:			
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"):	As specified by the parties.		
Floating Rate Payer ("payerPartyReference"):			
Floating Rate Payer ("payerPartyReference"):         Currency Amount ("notionalAmount"):         Period End Dates ("unadjustedCalculation Period	As specified by the parties. As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date:	As specified by the parties. As specified by the parties. As specified by the parties if there is a short initial Calculation Period.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"):	As specified by the parties. As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date:	As specified by the parties. As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate:	As specified by the parties. As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: initial Floating Rate:	As specified by the parties. As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. As specified by the parties. As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: initial Floating Rate: Floating Rate Option ("floatingRateIndex"):	As specified by the parties. As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: initial Floating Rate: Floating Rate Option ("floatingRateIndex"): Designated Maturity ('indexTenor")	As specified by the parties. As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: initial Floating Rate: Floating Rate Option ("floatingRateIndex"): Designated Maturity ('indexTenor") Linear Interpolation:	As specified by the parties. As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. For the Calculation Periods specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: initial Floating Rate: Floating Rate Option ("floatingRateIndex"): Designated Maturity ('indexTenor")	As specified by the parties. As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. For the Calculation Periods specified by the parties. For a Calculation Period to which Linear Interpolation		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: initial Floating Rate: Floating Rate Option ("floatingRateIndex"): Designated Maturity ('indexTenor") Linear Interpolation: Shorter Designated Maturity for Linear Interpolation:	As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. For the Calculation Periods specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: Floor Rate: Floating Rate Option ("floatingRateIndex"): Designated Maturity ('indexTenor") Linear Interpolation:	As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. For the Calculation Periods specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties. For a Calculation Period to which Linear Interpolation		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: initial Floating Rate: Floating Rate Option ("floatingRateIndex"): Designated Maturity ('indexTenor") Linear Interpolation: Shorter Designated Maturity for Linear Interpolation: Longer Designated Maturity for Linear Interpolation:	As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. For the Calculation Periods specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floating Rate: Floating Rate: Floating Rate Option ("floatingRateIndex"): Designated Maturity ('indexTenor") Linear Interpolation: Shorter Designated Maturity for Linear Interpolation: Longer Designated Maturity for Linear Interpolation: Spread:	As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. For the Calculation Periods specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties. As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: Floor Rate: Floating Rate Option ("floatingRateIndex"): Designated Maturity ('indexTenor") Linear Interpolation: Shorter Designated Maturity for Linear Interpolation: Longer Designated Maturity for Linear Interpolation: Spread: Day Count Fraction:	As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. For the Calculation Periods specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties. As specified by the parties.		
Floating Rate Payer ("payerPartyReference"): Currency Amount ("notionalAmount"): Period End Dates ("unadjustedCalculation Period Date"): first Period End Date: Payment Dates ("unadjustedPaymentDate"): Cap Rate: Floor Rate: initial Floating Rate: Floating Rate Option ("floatingRateIndex"): Designated Maturity ('indexTenor") Linear Interpolation: Shorter Designated Maturity for Linear Interpolation: Longer Designated Maturity for Linear Interpolation: Spread:	As specified by the parties. As specified by the parties if there is a short initial Calculation Period. As specified by the parties. As specified by the parties. For the Calculation Periods specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties. For a Calculation Period to which Linear Interpolation applies, as specified by the parties. As specified by the parties.		

Compounding Dates:	In the event Compounding is selected, as selected by the
Compounding Mathed (Compounding OD Flat	parties.
Compounding Method (Compounding OR Flat Compounding):	In the event Compounding is selected, as selected by the parties.
Period End Dates Business Days:	As specified by the parties from among the Available
renou Linu Dates Dusiness Days.	Business Days.
Period End Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Reset Dates Business Days:	As specified by the parties from among the Available
Reset Dates Business Day Convention:	Business Days, subject to any Required Business Days. As specified by the parties from among the Available
Initial Evaluation	Business Day Conventions.
Initial Exchange:	As specified by the parties
Initial Exchange Date:	As specified by the parties.
Fixed Rate Payer Initial Exchange Amount:	As specified by the parties.
Floating Payer Initial Exchange Amount:	As specified by the parties.
Interim Exchanges:	
Interim Exchange Dates:	As specified by the parties.
Fixed Rate Payer Interim Exchange Amount:	As specified by the parties.
Fixed Rate Payer Interim Exchange Amount:	As specified by the parties.
Final Exchanges:	
Final Exchange Date:	As specified by the parties.
Fixed Rate Payer Final Exchange Amount:	As specified by the parties.
Fixed Payer Final Exchange Amount:	As specified by the parties.
Optional Early Termination:	
Optional Early Termination:	As specified by the parties.
Option Style:	As specified by the parties.
Optional Early Termination Date:	As specified by the parties.
Seller:	As specified by the parties if only one party can terminate.
Buyer:	As specified by the parties, if only one party can terminate.
Seller's Agent:	As specified by the parties, if only one party can terminate.
Business Days for Payments:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Exercise Business Days:	As specified by the parties.
Optional Early Termination Procedure for Exercise:	
Commencement Date:	As specified by the parties, if the Option Style is American.
Bermuda Option Exercise Dates:	As specified by the parties, if the Option Style is Bermuda.
Expiration Date:	As specified by the parties.
Expiration Time:	As specified by the parties.
Earliest Exercise Time:	As specified by the parties.
Latest Exercise Time:	As specified by the parties.
Exercise Business Day:	As specified by the parties.
Partial Exercise:	As specified by the parties, if Option Style is European.
	As specified by the parties, if Option Style is European. As specified by the parties, if Option Style is American
Multiple Exercise:	or Bermuda.

Minimum Notional Amount:	As specified by the parties if Partial Exercise or		
	Multiple Exercise is specified.		
Maximum Notional Amount:	As specified by the parties if Multiple Exercise is		
	specified.		
Integral Multiple:	As specified by the parties if Partial Exercise or		
	Multiple Exercise is specified.		
<b>Optional Early Termination Settlement Terms:</b>			
Cash Settlement:	As specified by the parties.		
ISDA Settlement Matrix:	As specified by the parties, if Cash Settlement is		
	applicable.		
Cash Settlement Valuation Time:	If Cash Settlement is applicable, as specified by the		
	parties, directly or via the ISDA Settlement Matrix.		
Cash Settlement Valuation Date:	If Cash Settlement is applicable, as specified by the		
	parties, directly or via the ISDA Settlement Matrix.		
Valuation Business Days:	If Cash Settlement is applicable, as specified by the		
	parties, directly or via the ISDA Settlement Matrix.		
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the		
	parties, directly or via the ISDA Settlement Matrix.		
Cash Settlement Payment Date Business Days	If Cash Settlement is applicable, as specified by the		
Convention:	parties, directly or via the ISDA Settlement Matrix.		
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the		
	parties from Available Cash Settlement Methods,		
	directly or via the ISDA Settlement Matrix.		
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or		
5	"Cash Price—Alternate" apply, as specified by the		
	parties from Available Cash Settlement Methods,		
	directly or via the ISDA Settlement Matrix.		
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield		
	Curve—Adjusted," "Par Yield Curve—Unadjusted" or		
	"Zero Coupon Curve—Adjusted" apply, as specified by		
	the parties from Available Cash Settlement Methods,		
	directly or via the ISDA Settlement Matrix parties from		
	Available Cash Settlement Methods, directly or via the		
	ISDA Settlement Matrix.		
Cash Settlement Reference Banks:	As specified by the parties.		
Quotation Rate:	If Cash Settlement is applicable, as specified by the		
	parties from among the Available Quotation Rates.		

## Cap/Floor Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
EUR	Euro	EUTA
GBP	Pound Sterling	GBLO
JPY	Japanese Yen	JPTO
MXN	Mexican Peso (New)	MXMC
SEK	Swedish Krona	SEST
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

#### Cap/Floor Available Business Day Conventions

ISDA Name	
Following	
Modified/Modified Following	
No Adjustment	
Preceding	
FRN Convention/Eurodollar Convention	

#### Cap/Floor Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

#### Cap/Floor Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP, MXN	Plus Two Banking Days
MXN	Plus One Banking Day
CAD, GBP	Plus Zero

#### Cap/Floor Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termination
	Date		Date	Date
N/A	N/A	N/A	N/A	N/A

#### Cap/Floor Notional Amounts

Currency	Minimum	Increment	Maximum	Default
EUR	5,000,000	100,000	N/A	N/A
GBP	25,000,000	100,000	N/A	N/A
JPY	2,500,000,000	100,000,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
USD	25,000,000	1,000,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

### Cap/Floor Floating Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap	All quoted tenors	N/A	Per ISDA 2006	Ν

Rate-10:00-Bloomberg				
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-10:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-11:00- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-3 Month- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- 11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-OIS- COMPOUND- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EONIA-Swap- Index	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-EURIBOR- Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν

EUR-EURONIA-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC10- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC5-CNO- SwapMarker	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
EUR-TMM-CDC- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
GBP-WMBA-SONIA- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	Ν
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	Ν
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-SIOR-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	Ν

USD-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds- H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- H.15-OIS- COMPOUND	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Federal Funds- Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to
P				

				Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-LON- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-11:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-OIS-3:00-NY- ICAP	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL-H.15- Bloomberg	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TBILL- Secondary Market	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-TIBOR- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T19901	All quoted tenors	N/A	Per ISDA 2006	Ν
USD-Treasury Rate- T500	All quoted tenors	N/A	Per ISDA 2006	Ν
VND-Semi-Annual Swap Rate-11:00- BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	Ν
VND-Semi-Annual	All quoted tenors	N/A	Per ISDA 2006	Ν

Swap Rate-Reference Banks				
ZAR-DEPOSIT- Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-DEPOSIT- SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-JIBAR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-JIBAR-SAFEX	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-PRIME- AVERAGE	All quoted tenors	N/A	Per ISDA 2006	Ν
ZAR-PRIME- AVERAGE-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	Ν

Cap/Floor Requirements and Defaults (Excluding Optional Early Termination and Mandatory Early Termination)

Variable	Requirement	Default
Effective Date Business Day		No Adjustment
Convention:		-
Termination Date Business Day		No Adjustment
Convention:		
Period End Dates:		Payment Dates
Payment Date Business Day		Modified Following
Convention:		
Linear Interpolation:		Applicable only to long or short stub
		periods
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation:		longer than the actual Calculation
		Period length
Compounding:		Inapplicable
Compounding Business Day	Same as Business Day Convention	
Convention:	for Period End Dates	
Method of Averaging:	Weighted Average or Unweighted	Unweighted Average
	Average	
Compounding Method:	Compounding or Flat Compounding	Compounding
Initial Exchange Date:		Effective Date
Initial Exchange Date Business Day		Following
Convention:		
Interim Exchange Date Business		Modified Following
Day Convention:		_
Final Exchange Date:		Termination Date
Final Exchange Date Business Day		Modified Following
Convention:		

Cap/Floor Requirements and Defaults (Optional Early Termination and Mandatory Early Termination)

Setting Requirement Default
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Optional Early Termination:		Inapplicable
Mandatory Early Termination:		Inapplicable
Option Style:	American, Bermuda, European	
Cash Settlement:	Required for Mandatory Early	Applicable (i.e., Transaction is <b>not</b>
	Termination	"torn up for no value")
Optional Early Termination Date:		Cash Settlement Payment Date
Optional Early Termination Date		Following
Business Day Convention:		
Mandatory Early Termination Date		Modified Following
Business Day Convention:		

Cap/Floor Requirements and Defaults (Optional Early Termination—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day:		Banking Day for cash Settlement
		Currency (TARGET Settlement Day
		for EUR)
Latest Exercise Time:	On Expiration Date, the Expiration	Other than Expiration Date, the
	Time	Expiration Time

### Cap/Floor Requirements and Defaults (Cash Settlement)

Setting	Requirement/Choices	Default
Cash Settlement Amount:		
ISDA Settlement Matrix:		Applicable, if single currency swap with Currency included in Matrix
Cash Settlement Valuation Time:		
Cash Settlement Valuation Date:		Two Valuation Business Days before Mandatory/Optional Early Termination Date <b>but</b> same day for CAD, GBP or DKK with Floating Rate Option of "DKK-CIBOR- DKNA13" or "DKK-CIBOR-
		DKNA13-Bloomberg"
Valuation Business Day:		Banking Days in locations per the Business Day Location Table, plus additional days required by for fixings under the Floating Rate Option(s)
Cash Settlement Payment Date		Following
Business Day Convention:		
Cash Settlement Method:	Cash Price Cash Price—Alternate Method Par Yield Curve—Adjusted Par Yield Curve—Unadjusted Zero Coupon Yield—Adjusted	
Cash Settlement Currency:		For single currency, same as Notional Amount, otherwise as

		specified in ISDA Master Agreement, or otherwise same as Notional Amount for Fixed Amount
Settlement Rate:	ISDA Source/Other Price Source/Reference Banks	
Cash Settlement Reference Banks:		Fallbacks per ISDA 2006 Definitions
Quotation Rate:	bid ask mid Exercising Party Pays (Optional Early Termination Only)	

# Interest Rate Swaps – ASX Cleared

Summary:	This covers interest rate swaps cleared by ASX Clear
	(Futures) Pty Limited ("ASX") (such swaps, "Interest
	Rate Swaps – ASX Cleared").
Limitations on Available Selections and Default	The terms under which an Interest Rate Swap – ASX
Settings:	Cleared may be traded are as specified in these terms
	and conditions, which incorporate the ASX OTC
	Rulebook and the ASX OTC Handbook (collectively,
	the "ASX Rules"), in particular Schedule 1 to the ASX
	OTC Handbook (and any successor provisions).
	By electing to trade a Single Currency Fixed for
	Floating Interest Rate Swap – ASX Cleared,
	participants are representing that they are familiar
	with the ASX Rules and the limitations on
	transaction terms contained therein.
	In particular, participants represent that they are familiar with the limitations on transactions for US
	Persons set forth in Section 4.3 of the ASX OTC
	Handbook (or any successor provisions).
Incorporated Standards:	This contract description incorporates by reference the
incor por area standar us.	ASX Rules as in effect from time to time.
	The ASX Rules themselves may incorporate certain
	additional standards, such as the 2006 ISDA
	Definitions.
	Be aware that the timing of effectiveness of
	amendments or supplements to the ISDA standards
	may vary between bilateral and ASX-cleared
	contracts, since ASX may reserve the right to select
	when and how such changes become effective.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product(s):	Fixed Float, OIS and Basis
Further Limitations:	Must comply with the ASX Rules.
Terms:	
Definition Set:	The definition set (e.g., ISDA 2006, as amended)
	binding on the parties in accordance with the ASX
	Rules.
Notional Amount:	An amount in Currency determined by the parties
	subject to limitations in the ASX Rules.
	This may vary from period to period to the extent
	permitted by the ASX Rules.
	The ASX Rules may limit the Currencies and Floating
0	Rate Options for which variable notionals are permitted.
Currency:	One of the currencies permitted for the relevant
Designed Designed	transaction type per the ASX Rules.
Business Days:	As per the ASX Rules, which may require certain
	Business Days be applicable on a per Currency or
	Floating Rate Option Basis and may otherwise limit the
	available Business Day locations which can be elected.
Business Llav Convention	As per the ASX Rules.
Business Day Convention: Trade Date:	As per the ASX Rules.

Effective Date:	As per the ASX Rules.
Termination Date:	As agreed by the parties, subject to any minimum or
	maximum tenor in the ASX Rules.
Termination Date Business Day Convention:	As per the ASX Rules, and thus subject to limitations
	based on other terms of the transaction.
Stub Periods:	Permitted to the extent allowed under the ASX Rules.
Fixed Rate Payer Payment Dates:	For fixed-for-floating interest rate swaps, as per the ASX Rules.
Fixed Amount:	For fixed-for-floating interest rate swaps, as per the ASX Rules.
Fixed Rate:	As agreed by the parties, subject to any minimum or maximum rate and per-period variability permitted in the ASX Rules and any other restrictions in the ASX Rules.
Floating Rate Payer Payment Dates:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the ASX Rules.
Floating Amount:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the ASX Rules.
Floating Rate Option:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the parties, subject to the ASX Rules, which may provide a more limited list of available options for a Currency than does the Definition Set.
Designated Maturity:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the ASX Rules, which may provide a more limited set of Designated Maturities than does the related rate source page.
Spread:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the parties, subject to any minimum or maximum rate and per-period variability permitted by the ASX Rules and any other restrictions in the ASX Rules.
Reset Dates:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the ASX Rules.
Floating Rate Daycount Fraction:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the ASX Rules.
Floating Rate for Initial Calculation Period:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the ASX Rules.
Fixed Rate Payer:	For fixed-for-floating interest rate swaps, as determined by the parties.
Floating Rate Payer:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the parties.
Compounding:	As per the ASX Rules.
Payer for Additional Payment/Fees:	As determined by the parties, subject to any limitations in the ASX Rules.
Additional Payment/Fees:	As determined by the parties, subject to any limitations in the ASX Rules.

Payment Date for Additional Payment/Fees	As determined by the parties, subject to any limitations
	in the ASX Rules.

# **Interest Rate Swaps – Eurex Cleared**

Summary:	This covers interest rate swaps cleared by Eurex Clearing AG ("Eurex") (such swaps, "Interest Rate Swaps – Eurex Cleared").
Limitations on Available Selections and Default Settings:	The terms under which an Interest Rate Swap – Eurex Cleared may be traded are as specified in these terms and conditions, which incorporate the Eurex Clearing Conditions ( <i>Clearing-Bedingungen</i> ) (collectively, the "Eurex Rules").
	By electing to trade an Interest Rate Swap – Eurex Cleared, participants are representing that they are familiar with the Eurex Rules and the limitations on transaction terms contained therein.
Incorporated Standards:	This contract description incorporates by reference the Eurex Rules as in effect from time to time.
	The Eurex Rules themselves may incorporate certain additional standards, such as the 2000 ISDA Definitions, the 2006 ISDA Definitions or the <i>Rahmenvertrag für Finanztermingeschäfte</i> ("DRV"). <b>Be</b> <b>aware that the timing of effectiveness of amendments</b> <b>or supplements to the ISDA standards may vary</b> <b>between bilateral and Eurex-cleared contracts, since</b> <b>Eurex may reserve the right to select when and how</b> <b>such changes become effective. Also be aware that</b> <b>Eurex has elected to make the 2006 ISDA Definitions</b> <b>applicable to certain classes of transactions,</b> <b>regardless of the parties' election to use the 2000</b> <b>ISDA Definitions.</b>
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product(s):	Fixed Float, Inflation, OIS and Basis
Further Limitations:	Must comply with the Eurex Rules.
Terms:	
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2000 Definitions, ISDA 2006 Definitions, each as amended, the DRV) binding on the parties in accordance with the Eurex Rules.
Notional Amount:	An amount in Currency determined by the parties subject to limitations in the Eurex Rules.
	This may vary from period to period to the extent permitted by the Eurex Rules.
	The Eurex Rules may limit the Floating Rate Options and other terms for which variable notionals are permitted.

Currency:	One of the currencies permitted for the relevant transaction type per the Eurex Rules.
Business Days:	As per the Eurex Rules, which may require certain Business Days be applicable on a per Currency or Floating Rate Option Basis and may otherwise limit the available Business Day locations which can be elected.
Business Day Convention:	As per the Eurex Rules.
Trade Date:	As per the Eurex Rules.
Effective Date:	As per the Eurex Rules.
Termination Date:	As agreed by the parties, subject to any minimum or maximum tenor in the Eurex Rules for the related type of transaction and Currency.
Termination Date Business Day Convention:	As per the Eurex Rules, and thus subject to limitations based on other terms of the transaction.
Stub Periods:	Permitted to the extent allowed under the Eurex Rules.
Fixed Rate Payer Payment Dates:	For fixed-for-floating interest rate swaps, as per the Eurex Rules.
Fixed Amount:	For fixed-for-floating interest rate swaps, as per the Eurex Rules.
Fixed Rate:	As agreed by the parties, subject to any minimum or maximum rate and per-period variability permitted in the Eurex Rules and any other restrictions in the Eurex Rules.
Floating Rate Payer Payment Dates:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.
Floating Amount:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.
Floating Rate Option:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the parties, subject to the Eurex Rules, which may provide a more limited list of available options for a Currency than does the Definition Set.
Designated Maturity:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules, which may provide a more limited set of Designated Maturities than does the related rate source page.
Spread:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the parties, subject to any minimum or maximum rate and per-period variability permitted by the Eurex Rules and any other restrictions in the Eurex Rules.

Reset Dates:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.
Floating Rate Daycount Fraction:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.
Floating Rate for Initial Calculation Period:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as per the Eurex Rules.
Fixed Rate Payer:	For fixed-for-floating interest rate swaps, as determined by the parties.
Floating Rate Payer:	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the parties.
Compounding:	As per the Eurex Rules.
Payer for Additional Payment/Fees:	As determined by the parties, subject to any limitations in the Eurex Rules.
Additional Payment/Fees:	As determined by the parties, subject to any limitations in the Eurex Rules.
Payment Date for Additional Payment/Fees:	As determined by the parties, subject to any limitations in the Eurex Rules.

# Interest Rate Swaps – JSCC Cleared

Summary:	This covers interest rate swaps cleared by Japan Securities Clearing Corporation ("JSCC") (such swaps, "Interest Rate
	Swaps – JSCC Cleared").
Limitations on Available Selections and Default Settings:	The terms under which an Interest Rate Swap – JSCC Cleared may be traded are as specified in these terms and conditions, which incorporate the JSCC Interest Rate Swap Clearing
	Business Rules (金利スワップ取引清算業務に関する業務方
	法書)and the JSCC Handling Procedures of Interest Rate Swap
	Business Rules (金利スワップ取引清算業務に関する業務方
	法書の取扱い) (collectively, the "JSCC Rules").
	By electing to trade an Interest Rate Swap – JSCC Cleared, participants are representing that they are familiar with the JSCC Rules and the limitations on transaction terms
	contained therein.
	In particular, participants represent that they are familiar
	with the limitations on transactions for US Persons set forth
	in Article 47-2 of the JSCC Handling Procedures of Interest
	Rate Swap Business Rules (or any successor provisions).
Incorporated Standards:	This contract description incorporates by reference the JSCC
	Rules as in effect from time to time.
	The JSCC Rules themselves may incorporate certain additional standards, such as the 2000 ISDA Definitions or 2006 ISDA
	Definitions.
	Be aware that the timing of effectiveness of amendments or
	supplements to the ISDA standards may vary between
	bilateral and JSCC-cleared contracts, since JSCC may
	reserve the right to select when and how such changes
	become effective.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap Fixed Float, OIS and Basis
ISDA OTC Sub-Product(s): Further Limitations:	Must comply with the JSCC Rules.
Terms:	Must comply with the JSCC Rules.
Definition Set:	The definition set ( <i>e.g.</i> , ISDA 2000 or ISDA 2006, each as
Deminion Set.	amended) binding on the parties in accordance with the JSCC
	Rules.
Notional Amount:	An amount in Currency determined by the parties subject to
	limitations in the JSCC Rules.
	This may vary from period to period to the extent permitted by
	the JSCC Rules.
	The JSCC Rules may limit the Currencies and Floating Rate Options for which variable notionals are permitted.
Currency:	One of the currencies permitted for the relevant transaction
	type per the JSCC Rules.
Business Days:	As per the JSCC Rules, which may require certain Business
	Days be applicable on a per Currency or Floating Rate Option
	Basis and may otherwise limit the available Business Day
	locations which can be elected.
Business Day Convention:	As per the JSCC Rules.

Trade Date:	As per the JSCC Rules.
Effective Date:	As per the JSCC Rules.
Termination Date:	As agreed by the parties, subject to any minimum or maximum
	tenor in the JSCC Rules.
Termination Date Business Day Convention:	As per the JSCC Rules, and thus subject to limitations based on
	other terms of the transaction.
Stub Periods:	Permitted to the extent allowed under the JSCC Rules.
Fixed Rate Payer Payment Dates:	For fixed-for-floating interest rate swaps, as per the JSCC
	Rules.
Fixed Amount:	For fixed-for-floating interest rate swaps, as per the JSCC
	Rules.
Fixed Rate:	As agreed by the parties, subject to any minimum or maximum
	rate and per-period variability permitted in the JSCC Rules and
	any other restrictions in the JSCC Rules.
Floating Rate Payer Payment Dates:	For the floating leg of a fixed-for-floating interest rate swap or
	for each floating leg of a basis swap, as per the JSCC Rules.
Floating Amount:	For the floating leg of a fixed-for-floating interest rate swap or
	for each floating leg of a basis swap, as per the JSCC Rules.
Floating Rate Option:	For the floating leg of a fixed-for-floating interest rate swap or
	for each floating leg of a basis swap, as determined by the
	parties, subject to the JSCC Rules, which may provide a more
	limited list of available options for a Currency than does the
	Definition Set.
Designated Maturity:	For the floating leg of a fixed-for-floating interest rate swap or
	for each floating leg of a basis swap, as per the JSCC Rules,
	which may provide a more limited set of Designated Maturities
	than does the related rate source page.
Spread:	For the floating leg of a fixed-for-floating interest rate swap or
	for each floating leg of a basis swap, as determined by the
	parties, subject to any minimum or maximum rate and per-
	period variability permitted by the JSCC Rules and any other
	restrictions in the JSCC Rules.
Reset Dates:	For the floating leg of a fixed-for-floating interest rate swap or
Election Deter Descent Exections	for each floating leg of a basis swap, as per the JSCC Rules.
Floating Rate Daycount Fraction:	For the floating leg of a fixed-for-floating interest rate swap or
	for each floating leg of a basis swap, as per the JSCC Rules.
Floating Rate for Initial Calculation Period:	For the floating leg of a fixed-for-floating interest rate swap or
	for each floating leg of a basis swap, as per the JSCC Rules.
Fixed Rate Payer:	For fixed-for-floating interest rate swaps, as determined by the
Floating Rate Payer:	parties.
Floating Rate Payer.	For the floating leg of a fixed-for-floating interest rate swap or for each floating leg of a basis swap, as determined by the
Compounding	parties. As per the JSCC Rules.
Compounding: Payer for Additional Payment/Fees:	
rayer for Additional rayment/Fees:	As determined by the parties, subject to any limitations in the JSCC Rules.
Additional Payment/Fees:	As determined by the parties, subject to any limitations in the
	JSCC Rules.
Payment Date for Additional Payment/Fees	As determined by the parties, subject to any limitations in the
-	JSCC Rules.

## **IOS Index Contracts**

Summary:	This covers Markit IOS Fixed for Floating Swap Transactions (the "Contracts").
Limitations on Available Selections and Default	The terms under which the Contracts may be traded are
Settings:	as specified in these terms and conditions.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	In many cases there are normal "vanilla" terms on
	which the parties will transact.
	These are shown as "Default " and will apply unless the
	parties vary them.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions
	(b) ISDA OTC Taxonomies
	(c) the Markit IOS Standard Terms Supplement (March
	12, 2010 version) or any subsequent Standard Terms
	Supplement (the "Standard Terms")
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Credit
ISDA OTC Base Product:	Index
ISDA OTC Sub-Product:	IOS
ISDA OTC Transaction Type:	IOS
Further Limitations:	None
Terms:	
Effective Date:	As specified by the parties, subject to adjustment in
Sahadulad Tamination Data:	accordance with the Standard Terms.
Scheduled Termination Date:	As agreed by the parties.
Termination Date:	Per the Standard Terms.
Notional Amount:	An amount is USD agreed by the parties.
Index:	One of the Markit IOS Index series, as specified by the
	parties from all then-available series (to the extent such series is not then a narrow-based index within the
	meaning of the CFTC's regulations).
Annex Date:	As agreed by the parties.
Index Provider:	Per the Standard Terms.
Fixed Rate Payer:	As agreed by the parties.
Floating Rate Payer:	As agreed by the parties.
Period End Dates:	Per the Standard Terms.
Payment Dates:	Per the Standard Terms.
Calculation Agent:	As agreed by the parties or, if not so agreed, per the
Calculation Agent:	Standard Terms.
Day Count Fraction:	Per the Standard Terms.
Business Days:	For any purpose, per the Standard Terms.
Business Days. Business Day Convention:	Per the Standard Terms.
Initial Payment:	
Initial Payment:	Per the Standard Terms.
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Initial Payment Amount:	An amount in USD as specified by the parties.
Initial Payment Payer:	As specified by the parties.
Initial Payment Date:	Per the Standard Terms.
Settlement Payments:	
Mark to Market Amount Payment:	Per the Standard Terms.
Mark to Market Amount Payer:	Per the Standard Terms.
Mark to Market Amount:	Per the Standard Terms.
Financing Payment:	Per the Standard Terms.
Financing Payment Amount:	Per the Standard Terms.
Interest Payment:	Per the Standard Terms.
Interest Payment Amount:	Per the Standard Terms.
Net Payment:	Per the Standard Terms.
Net Payment Amount Payer:	Per the Standard Terms.
Net Payment Amount:	Per the Standard Terms.
Agency Coupon:	Per the Standard Terms.
Index LIBOR:	Per the Standard Terms.
Index Factor:	Per the Standard Terms.
Commencing Index Factor:	Per the Standard Terms.
Period End Index Factor:	Per the Standard Terms.
Index Price:	Per the Standard Terms.
Commencing Index Price:	Per the Standard Terms.
Period End Index Price:	Per the Standard Terms.
Event Affecting the Index:	
Events and Adjustments:	All are per the Standard Terms.

## **MBX Index Contracts**

Summary:	This covers Markit MBX Fixed for Floating Swap Transactions (the "Contracts").
Limitations on Available Selections and Default	The terms under which the Contracts may be traded are
Settings:	as specified in these terms and conditions.
Settings.	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	In many cases there are normal "vanilla" terms on
	which the parties will transact.
	These are shown as "Default" and will apply unless the
	parties vary them.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions;
	(b) ISDA OTC Taxonomies; and
	(c) the Markit MBX Standard Terms Supplement
	(September 12, 2010 version) or any subsequent
	Standard Terms Supplement (the "Standard
	Terms").
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Credit
ISDA OTC Base Product:	Index
ISDA OTC Sub-Product:	MBX
ISDA OTC Transaction Type:	MBX
Further Limitations:	None
Terms:	A '(* 11,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1
Effective Date:	As specified by the parties, subject to adjustment in
	accordance with the Standard Terms.
Scheduled Termination Date: Termination Date:	As agreed by the parties.
	Per the Standard Terms.
Notional Amount:	An amount is USD agreed by the parties.
Index:	One of the Markit MBX Index series, as specified by the
	parties from all then-available series (to the extent such series is not then a narrow-based index within the
	meaning of the CFTC's regulations).
Annex Date:	As agreed by the parties.
Index Provider:	Per the Standard Terms.
Fixed Rate Payer:	As agreed by the parties.
Floating Rate Payer:	As agreed by the parties.
Period End Dates:	Per the Standard Terms.
Reset Dates:	Per the Standard Terms
Payment Dates:	Per the Standard Terms.
Calculation Agent:	As agreed by the parties or, if not so agreed, per the
	Standard Terms.
Day Count Fraction:	Per the Standard Terms.
Business Days:	For any purpose, per the Standard Terms.
Business Day Convention:	Per the Standard Terms.

Initial Payment:	
Initial Payment:	Per the Standard Terms.
Initial Payment Amount:	An amount in USD as specified by the parties.
Initial Payment Payer:	As specified by the parties.
Initial Payment Date:	Per the Standard Terms.
Settlement Payments:	
Mark to Market Amount Payment:	Per the Standard Terms.
Mark to Market Amount Payer:	Per the Standard Terms.
Mark to Market Amount:	Per the Standard Terms.
Financing Payment:	Per the Standard Terms.
Financing Payment Amount:	Per the Standard Terms.
Interest Payment:	Per the Standard Terms.
Interest Payment Amount:	Per the Standard Terms.
Principal Payment:	Per the Standard Terms.
Principal Payment Amount:	Per the Standard Terms.
Net Payment:	Per the Standard Terms.
Net Payment Amount Payer:	Per the Standard Terms.
Net Payment Amount:	Per the Standard Terms.
Agency Coupon:	Per the Standard Terms.
Index LIBOR:	Per the Standard Terms.
Index Factor:	Per the Standard Terms.
Commencing Index Factor:	Per the Standard Terms.
Period End Index Factor:	Per the Standard Terms.
Index Price:	Per the Standard Terms.
Commencing Index Price:	Per the Standard Terms.
Period End Index Price:	Per the Standard Terms.
Event Affecting the Index:	
Events and Adjustments:	All are per the Standard Terms.

# **Municipal Market Data Rate Lock Transactions**

Terms a	nd Cor	nditions
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Summary:	This covers rate lock transactions indexed to the Thomson Reuters Municipal Market Data ("MMD")
	AAA Curve ("MMD Rate Lock Transactions").
Limitations on Available Selections and Default Settings:	The terms under which a MMD Rate Lock Transaction may be traded are as specified in these terms and conditions and in the attached tables.
	<ul><li>For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</li><li>For Business Days, the defaults shall be the locations specified.</li></ul>
	The parties may add additional locations from the Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made.
	For these purposes "TARGET" is considered a location. In many cases there are normal "vanilla" terms on which the parties will transact.
	These are shown as "Default " and will apply unless the
I	parties vary them.
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards:
	(a) 2006 ISDA Definitions
	(b) ISDA OTC Taxonomies
	(c) FpML Location Codes For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Exotic
Further Limitations:	None
Terms:	
Notional Amount ("notional"):	An amount in USD agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Effective Date
	as a number of Business Days or Banking Days from the
	Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available
	Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Termination Date ("terminationDate"):	<ul> <li>The date specified by the parties, adjusted in accordance with any applicable Business Day Convention.</li> <li>The parties may express the unadjusted Termination Date as a number of days, months or years from the Effective Date ("relativeTerminationDate").</li> </ul>

Termination Date Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
DV01:	As specified by the parties.
Fixed Amount:	
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notionalAmount"):	As specified by the parties.
Fixed Amount:	Notwithstanding anything to the contrary contained in the 2006 ISDA Definitions, the Fixed Amount shall equal:
$DV01 \times Fi$	ixed Rate × Currency Amount × Day Count Fraction
Fixed Rate Payment Dates ("unadjustedPaymentDate"):	The Termination Date
Day Count Fraction:	1/1
Floating Amount:	1/1
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notional Amount"):	As specified by the parties.
Floating Amount:	Notwithstanding anything to the contrary contained in the 2006 ISDA Definitions, the Floating Amount shall equal:
$DV01 \times Calculation Amount \times (Floating)$	Rate + Spread) × Floating Rate Day Count Fraction
Payment Dates ("unadjustedPaymentDate"):	The Termination Date
Relevant Rate:	The Relevant Rate for a Reset Date will be the level of the Thomson Reuters Municipal index for a tenor of the Designated Maturity which represents the offer-side of 5.00% coupon "AAA" rated state general obligation bonds based on institutional block size (\$2 million+) market activity in both the primary and secondary municipal bond market, as of at 3:00 p.m. eastern standard time as published on the Thomson Reuters TM3 page.
Designated Maturity ('indexTenor")	As specified by the parties from among the available tenors.
Spread:	Zero
Day Count Fraction:	1/1
Reset Dates ("resetDate"):	The second Business Day preceding the Floating Rate Payment Date.
Reset Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Reset Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.

## Fixed Floating Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY

### Fixed Floating Available Business Day Conventions

ISDA Name	
Following	
Modified/Modified Following	
No Adjustment	
Preceding	
FRN Convention/Eurodollar Convention	

### Notional Amounts

Currency	Minimum	Increment	Maximum	Default
USD	25,000,000	1,000,000	N/A	N/A

Municipal Market Data Rate Lock Transactions

### **Natural Gas Date/Instrument Spread Contracts**

Summary:	This covers "Natural Gas Date/Instrument Spread Contracts".
Summary.	A natural-gas date/instrument spread contract is a cash-settled
	agreement between two counterparties whereby one counterparty agrees
	to pay a floating amount to the other counterparty on a given date, and
	then receive a different floating amount from the other counterparty on a
	different, later date.
	The difference between the two floating amounts is the spread, which is
	the quoted price for the contract.
	The floating amounts are based on the notional quantity traded and the
	price of natural gas a stated hub published by one of a series of
	industry.
Publication Sources:	CGPR—Canadian Gas Price Reporter
	Gas Daily—Platt's Gas Daily's Daily Report
	• IFERC—Platt's Inside FERC Gas Market Reporter
	NGI—Natural Gas Intelligence's Bidweek Survey
	The floating amount can be based on the price for a given period in a
	given issue of the publication source ( <i>e.g.</i> , monthly based on the first
	issue of the month) or an average of prices (e.g., average of weekly
	bid prices for each weekly issue), as agreed by the parties.
Reference Commodities:	• AECO—Alberta Energy Co. (CGPR)
	ALG—Algonquin Energy Co. (IFERC)
	Chicago—Chicago City Gate (IFERC)
	CIG—Colorado Interstate Gas, North Mainline (IFERC)
	DOM—Dominion Transmission Co. (IFERC)
	HSC—Houston Ship Channel (IFERC)
	Malin—Pacific Gas Transmission Co., Malin (IFERC)
	Michigan—Michigan Consolidated Gas Company Citygate
	(IFERC)
	• NGPC Mid Con—Natural Gas Pipeline Co of America (IFERC)
	Panhandle—Panhandle Eastern Pipeline Co. (IFERC)
	• Permian—El Paso Natural Gas Co. Permian Basin Pool (IFERC)
	PG&E Citygate—PG&E Citygate (IFERC)
	Rockies—Northwest Pipeline, Rocky Mountain Pool (IFERC)
	• San Juan— El Paso Natural Gas Co. San Juan Basin Pool (IFERC)
	Socal—Socal Citygate (IFERC)
	• Sumas—Northwest Pipeline, Sumas (IFERC)
	TCO—Columbia Gas Transmission Company (IFERC)
	TETCO M3—Texas Eastern Transmission Corp M3 Zone
	(IFERC)
	• Texok— Natural Gas Pipeline Co of Americak TexOK (IFERC)
	• Trans Z6 NY—Transcontinenal Gas Pipeline, Zone 6 (NY)
	(IFERC)
	• Ventura—Northern Border Pipeline, Ventura (IFERC)
	• Waha—Waha Hub, West Texas (IFERC)
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Settlement Currency:	Currency in which payments are made between the two counterparties:
	• USD
	• CAD (AECO only)
Quoting Convention and Minimum	Notional amount, as agreed by counterparties.
Increment:	
Minimum Size:	Notional amount, as agreed by counterparties.

Notional Currency:	Currency in which payments are made between the two counterparties: • USD
	CAD (AECO only)
Trading Conventions:	Buy or Sell on the near leg and Buy or Sell on the far leg.
	These would be reversed so that if the first leg is buying the second leg
	must be selling, for instance.
Calculation Periods:	Two calculation periods – one for each leg of the spread.
	A single date or date range over which the reference price of the
	commodity will be calculated.
	If a date range the reference price will be averaged across the days,
	contracts or publication source issues as agreed by the counterparties.
Settlement Date(s):	Specified settlement or payment date when the floating amounts are
	exchanged.
Settlement Procedure:	Bilateral cash settlement performed in settlement currency.

# Natural Gas – Financial Basis Swap Contracts

Summary:	This covers "Natural Gas – Financial Basis Swap Contracts".
	A natural gas financial basis swap contract is a cash settled agreement between
	two counterparties whereby one counterparty agrees to pay a floating amount to the
	other counterparty on a given date(s), which floating amount is calculated based
	on the reported price for natural gas at a given hub, and in exchange, the second
	counterparty will pay a floating amount to the first counterparty on the same given
	date(s) based on the maturity price of a natural gas futures contract tied to a
	different hub.
	The floating amounts paid are determined based on the notional quantity and, in
	the case of the first floating amount, the price of natural gas a stated hub published
	by one of a series of industry publications and, in the case of the second floating
	amount, an applicable futures contract based on the reference commodity.
Publication Sources:	CGPR—Canadian Gas Price Reporter
	Gas Daily—Platt's Gas Daily's Daily Report
	IFERC—Platt's Inside FERC Gas Market Reporter
	NGI—Natural Gas Intelligence's Bidweek Survey
	The floating amount can be based on the price for a given period in a given issue
	of the Publication Source ( $e.g.$ , monthly based on the first issue of the month) or
	an average of prices ( <i>e.g.</i> , average of weekly bid prices for each weekly issue), as
	agreed by the parties.
Reference Commodities:	AECO—Alberta Energy Co. (CGPR)
Reference Commoutles:	
	ALG—Algonquin Energy Co. (IFERC)
	Chicago—Chicago City Gate (IFERC)
	CIG—Colorado Interstate Gas, North Mainline (IFERC)
	DOM—Dominion Transmission Co. (IFERC)
	HSC—Houston Ship Channel (IFERC)
	Malin—Pacific Gas Transmission Co., Malin (IFERC)
	Michigan—Michigan Consolidated Gas Company Citygate (IFERC)
	NGPC Mid Con—Natural Gas Pipeline Co of America (IFERC)
	Panhandle—Panhandle Eastern Pipeline Co. (IFERC)
	Permian—El Paso Natural Gas Co. Permian Basin Pool (IFERC)
	• PG&E Citygate—PG&E Citygate (IFERC)
	Rockies—Northwest Pipeline, Rocky Mountain Pool (IFERC)
	• San Juan— El Paso Natural Gas Co. San Juan Basin Pool (IFERC)
	• Socal—Socal Citygate (IFERC)
	• Sumas—Northwest Pipeline, Sumas (IFERC)
	TCO—Columbia Gas Transmission Company (IFERC)
	• TETCO M3—Texas Eastern Transmission Corp M3 Zone (IFERC)
	• Texok— Natural Gas Pipeline Co of Americak TexOK (IFERC)
	<ul> <li>Trans Z6 NY—Transcontinenal Gas Pipeline, Zone 6 (NY) (IFERC)</li> </ul>
	<ul> <li>Ventura—Northern Border Pipeline, Ventura (IFERC)</li> </ul>
	<ul> <li>Waha—Waha Hub, West Texas (IFERC)</li> </ul>
Contracts on Reference	<ul> <li>Waha—Waha Hub, West Texas (II EKC)</li> <li>NYMEX Henry Hub Natural Gas (Index Swap Future) Last Day Settlement</li> </ul>
Commodities:	For transactions where the settlement currency is CAD, this price will be
Commountes:	
G. 441	converted to CAD at then-current spot.
Settlement Currency:	Currency in which payments are made between the two counterparties:
	• USD
	CAD (AECO only)
Quoting Convention	Notional amount, as agreed by counterparties.
and Minimum	
Increment:	
Minimum Size:	Notional amount, as agreed by counterparties.

Notional Currency:	Currency in which the fixed and floating prices are quoted:
	• USD
	• CAD (AECO only)
Trading Conventions:	Buy or Sell which refers to whether or not the non-futures based floating amount is paid (buy) or received (sell).
Calculation Period:	A single date or date range over which the reference price of the commodity will be calculated.
	If a date range the reference price will be averaged across the days, contracts or Publication Source issues as agreed by the counterparties.
Trade Date:	The date on which counterparties enter into the contract.
Settlement Date(s):	Specified settlement or payment date(s) when the fixed payment amount and the
	floating payment amount are exchanged (can be netted).
Settlement Procedure:	Bilateral cash settlement performed in settlement currency.

# Natural Gas – Fixed/Floating Swap Contracts

Summary:	This covers "Natural Gas – Fixed/Floating Swap Contracts".
	A fixed/floating natural gas swap contract is a cash settled agreement between
	two counterparties whereby one counterparty agrees to pay a fixed amount to
	the other counterparty on a given date, and in exchange the second
	counterparty will pay a floating amount to the first counterparty on the same
	given date.
	The fixed amount paid is determined based on the notional quantity traded and
	the price of the reference commodity.
	The floating amount paid is determined based on the notional quantity and the
	price of an applicable futures contract based on the reference commodity over
	an agreed future calculation period.
<b>Reference Commodities:</b>	Henry Hub Natural Gas
	Waha Natural Gas
	Permian Natural Gas Basis Swap
	TTF Natural Gas
Contracts on Reference	• NYMEX Henry Hub Natural Gas (Index Swap Future)
Commodities:	NYMEX Waha Natural Gas Basis Swap
	NYMEX Permian Natural Gas Basis Swap
	• ICE TTF Natural Gas (Monthly)
Settlement Currency:	Currency in which payments are made between the two counterparties:
	• USD (Other than TTF)
	• EUR (TTF)
Quoting Convention and	Notional amount, as agreed by counterparties
Minimum Increment:	
Minimum Size:	Notional amount, as agreed by counterparties
Notional Currency:	Currency in which the fixed and floating prices are quoted:
[ ····································	• USD (Other than TTF)
	• EUR (TTF)
Trading Conventions:	Buy or Sell which refers to whether or not the fixed amount is paid (buy) or
	received (sell).
Calculation Periods:	A single date or date range over which the reference price of the commodity
	will be calculated.
	If a date range the reference price will be averaged across all days.
Trade Date:	The date on which counterparties enter into the contract.
Settlement Date(s):	Specified settlement or payment date when the fixed payment amount and the
Settlement Date(s).	floating payment amount are exchanged (can be netted).
Settlement Procedure:	Bilateral cash settlement performed in settlement currency.
settement rioteunie:	The contracts settle on both the NYMEX Last Day and NYMEX Penultimate
	publications.
	publications.

# <u>Natural Gas – Swing Swap Contracts</u>

G	
Summary:	This covers "Natural Gas – Swing Swap Contracts". A natural gas swing swap contract is a cash settled agreement between two
	counterparties whereby one counterparty agrees to pay a floating amount to
	the other counterparty on a given date(s), which floating amount is calculated
	based on the daily reported price for natural gas at a given hub, and in
	exchange the second counterparty will pay a floating amount to the first
	counterparty on the same given date(s) based on the price at the same hub
	reported for a different period (e.g., weekly or monthly).
	The floating amounts paid are determined based on the notional quantity and,
	in the case of the first floating amount, the daily price of natural gas a stated
	hub published by one of a series of industry publications and, in the case of the
	second floating amount, a price of natural gas the same hub published with
	respect to a different periodicity.
Publication Sources (Non-Daily):	CGPR—Canadian Gas Price Reporter
	• IFERC—Platt's Inside FERC Gas Market Reporter
	NGI—Natural Gas Intelligence's Bidweek Survey
	The floating amount can be based on the price for a given period in a given
	issue of the Publication Source ( <i>e.g.</i> , monthly based on the first issue of the
	month) or an average of prices ( <i>e.g.</i> , average of weekly bid prices for each
	weekly issue), as agreed by the parties.
Publication Sources (Daily):	Gas Daily –Platt's Gas Daily's Daily Report
Reference Commodities and Non-	• AECO—Alberta Energy Co. (CGPR)
Daily Publication Source:	ALG—Algonquin Energy Co. (IFERC)
	Chicago—Chicago City Gate (IFERC)
	• CIG—Colorado Interstate Gas, North Mainline (IFERC)
	• DOM—Dominion Transmission Co. (IFERC)
	HSC—Houston Ship Channel (IFERC)
	Malin—Pacific Gas Transmission Co., Malin (IFERC)
	Michigan—Michigan Consolidated Gas Company Citygate (IFERC)
	• NGPC Mid Con—Natural Gas Pipeline Co of America (IFERC)
	Panhandle—Panhandle Eastern Pipeline Co. (IFERC)
	• Permian—El Paso Natural Gas Co. Permian Basin Pool (IFERC)
	• PG&E Citygate—PG&E Citygate (IFERC)
	Rockies—Northwest Pipeline, Rocky Mountain Pool (IFERC)
	• San Juan— El Paso Natural Gas Co. San Juan Basin Pool (IFERC)
	Socal—Socal Citygate (IFERC)
	• Sumas—Northwest Pipeline, Sumas (IFERC)
	TCO—Columbia Gas Transmission Company (IFERC)
	• TETCO M3—Texas Eastern Transmission Corp M3 Zone (IFERC)
	• Texok— Natural Gas Pipeline Co of Americak TexOK (IFERC)
	<ul> <li>Trans Z6 NY—Transcontinenal Gas Pipeline, Zone 6 (NY) (IFERC)</li> <li>Venture Northern Border Pipeline, Venture (IEEPC)</li> </ul>
	• Ventura—Northern Border Pipeline, Ventura (IFERC)
Sattlamont Comparent	Waha—Waha Hub, West Texas (IFERC)
Settlement Currency:	Currency in which payments are made between the two counterparties:
	• USD
	CAD (AECO only)
Quoting Convention and	Notional amount, as agreed by counterparties.
Minimum Increment:	
Minimum Size:	Notional amount, as agreed by counterparties.
Notional Currency:	Currency in which the fixed and floating prices are quoted:
	• USD

	• CAD (AECO only)
Trading Conventions:	Buy or Sell which refers to whether or not the non-daily price based floating
	amount is paid(buy) or received (sell).
Calculation Period:	The reference price may be averaged across the days, contracts or publication
	source issues as agreed by the counterparties.
Trade Date:	The date on which counterparties enter into the contract.
Settlement Date(s):	Specified settlement or payment date(s) when the fixed payment amount and
	the floating payment amount are exchanged (can be netted).
Settlement Procedure:	Bilateral cash settlement performed in settlement currency.

# Non-Deliverable Swaps

Summary:	This covers non-deliverable single-currency swaps
	("Non-Deliverable Single-Currency Swaps") and non-
	deliverable cross-currency swaps ("Non-Deliverable
	Cross-Currency Swaps" and, together with Non-
	Deliverable Single-Currency Swaps, "Non-Deliverable
	Swaps").
Limitations on Available Selections and Default	The terms under which Non-Deliverable Single-
Settings:	Currency Swaps and Non-Deliverable Cross-Currency
	Swaps may be traded are as specified in these terms and conditions or in the attached tables.
	For amounts or rates, the relevant term cannot be less
	than the specified Minimum, must represent an even
	Increment and cannot exceed the Maximum; for a date,
	the date cannot be earlier than Earliest nor later than
	Latest.
	For Business Days, the defaults shall be the locations
	specified.
	The parties may add additional locations from the
	Available Locations and may eliminate some or all of
	the other locations, so long as there is at least one
	location in which payment may be made.
	For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on
	which the parties will transact.
	These are shown as "Default" and will apply unless the
	parties vary them.
Incorporated Standards:	This contract description incorporates by reference the
	following industry standard documentation and
	standards:
	(a) 2006 ISDA Definitions (including Supplement 31
	thereto);
	(b) ISDA OTC Taxonomies;
	(c) FpML Location Codes;
	(d) the ISDA/EMTA 1998 FX and Currency Option
	Definitions ("1998 Definitions");
	(e) the EMTA Non-Deliverable Forward Templates;
	(f) the EMTA-ISDA Market Practice for Non-
	Deliverable CLP " <i>Cámara</i> " (CLP TNA) Interest
	Rate Swap Transactions ("CLP TNA Best
	Practices");
	(g) the Recommended EMTA-ISDA Market Practice
	for BRL CDI Non-Deliverable Interest Rate Swap
	Transactions (Amended March 13, 2009) ("BRL
	CDI Best Practices''); (h) The current ISDA Revised Non-Deliverable Swap
	Transaction Standard Terms Supplement ("Asian STS"); and
	(i) The current ISDA Non-Deliverable Swap Transaction Fallback Matrix (the "Asian Matrix,"
	and, together with the Asian STS, the "Asian Terms")
	Terms").

	For convenience, certain terms are mapped to their
	FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Exotic
Further Limitations:	None
Terms:	
Settlement Currency:	With respect to Non-Deliverable Single-Currency
	Swaps, USD.
	With respect to any Non-Deliverable Cross-Currency
	Swap, for any currency pair selected by the parties from among those specified in the list of Available Currency
	Pairs, the currency specified as such in that list.
Index Currency:	With respect to any Non-Deliverable Single-Currency
index currency.	Swaps, the currency elected by the parties from among
	those specified in the list of Available Single
	Currencies.
	With respect to any Non-Deliverable Cross-Currency
	Swaps, for any currency pair selected by the parties
	from among those specified in the list of Available
	Currency Pairs, the currency specified as such in that
	list.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Effective Date
	as a number of Business Days or Banking Days from the
	Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available
-	Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance
	with any applicable Business Day Convention.
	The parties may express the unadjusted Termination
	Date as a number of days, months or years from the
	Effective Date ("relativeTerminationDate").
Termination Date Business Day Convention:	As specified by the parties from among the Available
FX Rate:	Business Day Conventions.           The amount of Index Currency corresponding to one
FA Kale.	unit of the Settlement Currency.
	The FX Rate will be determined on the date determined
	as specified for the relevant Available Single Currency
	or Available Currency Pair and in accordance:
	(a) in the case of Index Currencies not identified as
	subject to Asian Terms, with the specified NDF
	Template and Rate Sources and Fallback Rates, treating
	the scheduled date of determination of the FX Rate as
	the "Valuation Date" under the NDF Template; and
	(b) in the case of Index Currencies identified as subject
	to Asian Terms, in accordance with the Asian Terms.
Fixed Amount:	
Fixed Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notional"):	For any Non-Deliverable Single-Currency Swap
	Transaction or for any Non-Deliverable Cross-Currency

	Swap Transaction involving ARS or PEN, an amount in
	the Index Currency agreed by the parties.
	For any other Non-Deliverable Cross-Currency Swap
	Transaction, an amount in the Index Currency or
	Settlement Currency agreed by the parties.
Fixed Amount:	If the Currency Amount is denominated in the
	Settlement Currency, an amount calculated in
	accordance with the 2006 ISDA Definitions.
	If the Currency Amount is not denominated in the
	Settlement Currency and the Index Currency is not
	identified as being subject to Asian Terms, then
	notwithstanding anything to the contrary contained in
	the 2006 ISDA Definitions, the Fixed Amount shall
	equal an amount in the Settlement Currency equal to:
FX Rate × F	ixed Rate × Currency Amount × Day Count Fraction
	If the Currency Amount is not denominated in the
	Settlement Currency and the Index Currency is
	identified as being subject to Asian Terms, then the
	Fixed Amount shall be calculated in accordance with
	the Asian Terms.
Fixed Rate Period End Dates:	As specified by the parties, subject to adjustment in
	accordance with any Fixed Rate Payer Period End Date
	Business Day Convention.
Fixed Rate Payer Period End Date Business Days:	If a Fixed Rate Payer Period End Date Business Day
	Convention is applicable, as specified by the parties
	from among the Available Business Days.
Fixed Rate Payer Payment Date Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
	If "No Adjustment" is specified, then the Fixed Rate
	Payer Period End Dates will not be adjusted.
Fixed Rate Payment Dates:	As specified by the parties, subject to adjustment in
	accordance with the Fixed Rate Payer Payment Date
	Business Day Convention.
Fixed Rate Payer Payment Date Business Days:	As specified by the parties from among the Available
	Business Days.
Fixed Rate Payer Payment Date Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Day Count Fraction:	As specified by the parties from among the Available
	Day Count Fractions.
Floating Amount:	
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.
Currency Amount ("notional"):	For any Non-Deliverable Single-Currency Swap
	Transaction, an amount in the Index Currency agreed
	by the parties.
	For any Non-Deliverable Cross-Currency Swap, an
	amount in the Settlement Currency agreed by the
	parties.
	For any other Non-Deliverable Cross-Currency Swap,
	an amount agreed by the parties in whichever of the
	Index Currency or Settlement Currency is not the
	currency in which the Fixed Rate Payer Currency
	currency in which the Fixed Rate Payer Currency Amount is denominated.
Floating Amount:	currency in which the Fixed Rate Payer Currency Amount is denominated. If the Currency Amount is denominated in the
Floating Amount:	currency in which the Fixed Rate Payer Currency Amount is denominated.

	If the Common on Amount is don one in stad in DDL then
	If the Currency Amount is denominated in BRL, then
	notwithstanding anything to the contrary contained in
	the 2006 ISDA Definitions, the Floating Amount shall
	be calculated as set forth under Definition of BRL
	Floating Rate Option.
	If the Currency Amount is not denominated in the
	Settlement Currency or BRL and the Index Currency is
	not identified as being subject to Asian Terms, then
	notwithstanding anything to the contrary contained in
	the 2006 ISDA Definitions, the Floating Amount shall
	equal an amount in the Settlement Currency equal to:
FX Rate $\times$ Currency Amount $\times$ (Floating	Rate + Spread) × Floating Rate Day Count Fraction
TA have A burrency hindula A (Fibating	If the Currency Amount is not denominated in the
	Settlement Currency and the Index Currency is
	identified as being subject to Asian Terms, then the
	Floating Amount shall be calculated in accordance with
	the Asian Terms.
Floating Rate Option:	For the relevant Currency, as selected by the parties
	from among the Available Floating Rate Options for
	such Currency.
Designated Maturity ('indexTenor"):	As specified by the parties from among the available
	tenors.
Spread:	As specified by the parties.
Reset Dates ("resetDate"):	As specified by the parties.
Reset Dates Business Days:	As specified by the parties from among the Available
2	Business Days, subject to any Required Business Days.
Reset Dates Business Day Convention:	As specified by the parties from among the Available
Tesser Dates Dasmess Day Convention.	Business Day Conventions.
Floating Rate Period End Dates:	As specified by the parties, subject to adjustment in
Touting Rate Ferrod End Dates.	accordance with any Floating Rate Payer Period End
	Date Business Day Convention.
Floating Rate Payer Period End Date Business Days:	If a Floating Rate Payer Period End Date Business Day
Floating Rate Payer Period End Date Dusiness Days.	
	Convention is applicable, as specified by the parties
	from among the Available Business Days.
Floating Rate Payer Payment Date Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
	If "No Adjustment" is specified, then the Floating Rate
	Payer Period End Dates will not be adjusted.
Floating Rate Payment Dates:	As specified by the parties, subject to adjustment in
	accordance with the Floating Rate Payer Payment Date
	Business Day Convention.
Floating Rate Payer Payment Date Business Days:	As specified by the parties from among the Available
	Business Days.
Floating Rate Payer Payment Date Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.
Day Count Fraction:	As specified by the parties from among the Available
	Day Count Fractions.
Compounding:	As specified by the parties.
Method of Averaging:	As specified by the parties.
Final Exchange:	
	As specified by the parties
Final Exchange Date:	As specified by the parties.
Final Exchange Business Days:	As specified by the parties from among the Available
	Business Days.
Final Exchange Business Day Convention:	As specified by the parties from among the Available
	Business Day Conventions.

Fixed Rate Payer Final Exchange Amount:	If the Fixed Rate Payer Final Exchange Amount is denominated in the Settlement Currency, the Fixed Rate Payer Final Exchange Amount. If the Fixed Rate Payer Final Exchange Amount is denominated in the Index Currency and the Index Currency is not identified as being subject to Asian Terms, an amount in the Settlement Currency equal to:
FX Rate × Currency Amount	
	If the Fixed Rate Payer Final Exchange Amount is not
	denominated in the Settlement Currency and the Index
	Currency is identified as being subject to Asian Terms,
	then the Fixed Rate Payer Final Exchange Amount shall
	be calculated in accordance with the Asian Terms.
Floating Rate Payer Final Exchange Amount:	If the Floating Rate Payer Final Exchange Amount is
	denominated in the Settlement Currency, the Floating
	Rate Payer Final Exchange Amount.
	If the Floating Rate Payer Final Exchange Amount is
	denominated in the Index Currency and the Index
	Currency is not identified as being subject to Asian
	Terms an amount in the Settlement Currency equal to:
FX Rate  imes Currency Amount	
	If the Floating Rate Payer Final Exchange Amount is
	not denominated in the Settlement Currency and the
	Index Currency is identified as being subject to Asian
	Terms, then the Floating Rate Payer Final Exchange
	Amount shall be calculated in accordance with the
	Asian Terms.

## Non-Deliverable Swap Settlement Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY

# Non-Deliverable Swap Available Currencies

Index Currency	NDF Template	Rate Source	Fallback Rate Source(s) (in	Determination Date	Business Days
			order)		
INR	N/A	N/A	N/A	N/A	INMU
MYR	N/A	N/A	N/A	N/A	MYKL
THB	N/A	N/A	N/A	N/A	THBA

## Non-Deliverable Cross-Currency Swap Available Currency Pairs

Index	Settlement	NDF	Rate Source	Fallback Rate	Determinatio	Business
Currency	Currency	Template		Source(s) (in	n Date	Days
				order)		
ARS	USD	17 May 06	ARS03	ARS04	Payment – 2	ARBA
					BD	USNY
BRL	USD	17 May 06	BRL09	BRL12,	Payment – 2	USNY and
				BRL13	BD	any of
						BR{SP,RJ,
						BR}
CLP	USD	01 Aug 06	CLP10	CLP11	Payment – 2	CLSA

					BD	USNY
COP	USD	01 Aug 06	COP02	COP03	Payment – 2	USNY
		_			BD	COBO
PEN	USD	03 Dec 07	PEN05	PEN04	Payment – 2	USNY
					BD	PELI

## Applicability of Asian Terms

Index Currency	Asian Terms	
ARS	Not Applicable	
BRL	Not Applicable	
CLP	Not Applicable	
СОР	Not Applicable	
INR	Applicable	
MYR	Applicable	
PEN	Not Applicable	
THB	Applicable	

### Non-Deliverable Swap Floating Rate Options

Index Currency	Floating Rate Option	Defined In	Business Days
ARS		Not Applicable—Fixed Leg ONLY	
BRL	BRL-CDI-CETIP	See below	USNY and any of BR{SP,RJ, BR}
CLP	CLP-Indice Cámara Promedio (ICP)	CLP TNA Best Practices	USNY CLSA
CLP	CLP-Unidad de Fomentos (UF/CLF)	See below	USNY CLSA
СОР	COP-IBR-OIS- COMPOUND	ISDA 2006	USNY COBO
СОР	COP-Unidad de Valor Real (UVR)	See below	USNY COBO
INR	INR-FBIL-MIBOR-OIS- COMPOUND	ISDA 2006	INMU
INR	INR-MITOR-OIS- COMPOUND	ISDA 2006	INMU
MYR	MYR-KLIBOR-BNM	ISDA 2006	MYKL
PEN	Not Applicable—Fixed Leg ONLY		USNY PELI
THB	THB-THBFIX-Reuters	ISDA 2006	THBA
USD	Any USD Floating Rate Option available under tpSEF's Fixed/Floating Swap Listing	See tpSEF's Fixed/Floating Swap Listing	See tpSEF's Fixed/Floating Swap Listing

### Definition of BRL Floating Rate Option

Floating Amount:	Notwithstanding anything to the contrary
$FX Rate \times Currency Amount \times \left[\prod_{j=1}^{N} \left(1 + \frac{Rel}{m}\right)\right]$	$\left(\frac{evant Rate_j}{252}\right) - 1 \right]^{252/N}$
Where:	

	N=number of Reset Dates in the Calculation Period
	j=a particular Reset Date
	<i>Relevant Rate</i> =the Relevant Rate for instance <i>j</i> of Reset Date
BRL-CDI-CETIP:	<ul> <li>For any Reset Date, the Overnight Brazilian Interbank Deposit Rate Annualized, known as the average ("Media") of the DIOVER- EXTRA Group as published by CETIP (<i>Câmara de</i> <i>Custódia e Liquidação</i>) (the "Overnight CDI Rate") for such date; provided that (i) such rate is published not later than 12:00 p.m. on the Brazil Business Day next following such Reset Date and (ii) any adjustments made by CETIP to such rate at any time later than the end of the business day on such Reset Date shall not be taken into account.</li> <li>If for any Reset Date there is no published Overnight CDI Rate (including as a result of the proviso above), CDI for the relevant Reset Date will be the overnight deposit rate published for such date by the BM&amp;F in accordance with its rules (see http://www.bmf.com.br/portal/pages/boletim1/bd_manual/indic a doreFinanceiros1.asp, or any successor page).</li> <li>If the BM&amp;F does not publish such a rate for such date, CDI for the relevant Reset Date shall be determined jointly by the parties.</li> <li>If the parties do not agree on a determination of such rate within one Brazil Business Day following the relevant Reset Date, CDI shall be determined through a CDI Reference Dealer Poll as described herein.</li> <li>If CDI for a Reset Date is not so determined by a CDI Reference Dealer Poll, BRL-CDI-Reference Dealers shall</li> </ul>
BRL-CDI-Reference Dealers:	<ul> <li>Reference Dealer Poll, BKL-CDI-Reference Dealers shall apply.</li> <li>If applicable for a Reset Date as set forth above, the Calculation Agent shall conduct up to four dealer polls commencing on the Brazil Business Day following the relevant Reset Date, in each case by requesting each of the CDI Reference Dealers to provide a quotation of the CDI.</li> <li>If at least four such quotations are obtained from CDI Reference Dealers in any such poll, the highest and lowest quotations will be disregarded and CDI for the relevant Reset Date will equal the arithmetic mean of the remaining quotations.</li> <li>If fewer than four such quotations are obtained from a poll, the Calculation Agent shall conduct additional such polls until four such quotations are obtained in any poll; provided that the Calculation Agent shall not conduct more than four polls in the aggregate (with not more than two polls on any day and with such polls conducted over not more than two Brazil Business Days).</li> <li>If four quotations are not obtained from any of such four polls, CDI shall CDI shall not be determined by a CDI Reference</li> </ul>
CDI Reference Dealers:	Dealer Poll. At least six and not more than eight leading onshore dealers in
Reset Dates ("resetDate"):	the CDI market selected by the Calculation Agent.Each Scheduled Reset Date (as defined in the BRL CDI Best
	Practices).
Reset Dates Business Days:	As specified by the parties from among the Available BR Business Days.
Available BR Business Days:	Any of BR{SP,RJ, BR} and not otherwise declared a financial

### market holiday by the BM&F.

CLP- <u>Unidad de Fomento (UF/CLF)</u> :	For any Reset Date, the difference between the value of the <i>unidad de fomento (UF/CLF)</i> as certified by the Chilean <i>Banco Central de Chile</i> for the calendar day preceding such Reset Date and the value of the <i>unidad de fomento (UF/CLF)</i> as certified by the Chilean <i>Banco Central de Chile</i> for such Reset Date. The Calculation Agent shall convert such difference to the appropriate annualized percentage based on the terms of the Floating Amount payable by reference to the CLP- <u>Unidad de Fomento (UF/CLF)</u> . If for any Reset Date there is no published value of the <i>unidad de fomento (UF/CLF)</i> as certified by the Chilean <i>Banco</i>
	<i>Central de Chile</i> , the Calculation Agent shall determine the CLP-Unidad de Fomento (UF/CLF) for such day.

#### Definition of CLP-Unidad de Fomento (UF/CLF)

#### Definition of COP-Unidad de Valor Real (UVR)

COP- <u>Unidad de Valor Real (UVR)</u> :	<ul> <li>For any Reset Date, the difference between the value of the <i>unidad de valor real (UVR)</i> as certified by the Colombian <i>Banco de Republica</i> for the calendar day preceding such Reset Date and the value of <i>unidad de valor real (UVR)</i> as certified by the Colombian <i>Banco de Republica</i> for such Reset Date. The Calculation Agent shall convert such difference to the appropriate annualized percentage based on the terms of the Floating Amount payable by reference to the COP-<u>Unidad de Valor Real (UVR)</u>.</li> <li>If for any Reset Date there is no published the difference between the value of the <i>unidad de valor real (UVR)</i> as certified by the Colombian <i>Banco de Republica</i>, the Calculation Agent shall determine the COP-Unidad de Valor Real (UVR) for such</li> </ul>
	shall determine the COP- <u>Unidad de Valor Real (UVR)</u> for such day.

### Non-Deliverable Swap Available Day Count Fractions

ISDA Name		
1/1		
30/360, 360/360, Bond Basis		
Actual/360		
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F		
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)		
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)		

#### Non-Deliverable Swap Available Business Day Conventions

ISDA Name	
Following	
Modified/Modified Following	
No Adjustment	
Preceding	
FRN Convention/Eurodollar Convention	

# Non-Deliverable Single-Currency Swap Notional Amounts

Currency	Minimum	Increment
INR	5,000,000	100,000
MYR	5,000,000	100,000
RHB	5,000,000	100,000

# Non-Deliverable Cross-Currency Swap Notional Amounts

Currency	Minimum	Increment	
ARS	As implied by the USD minimum	As implied by the USD increment	
BRL	As implied by the USD minimum	As implied by the USD increment	
CLP	As implied by the USD minimum	As implied by the USD increment	
СОР	As implied by the USD minimum	As implied by the USD increment	
PEN	As implied by the USD minimum	As implied by the USD increment	
USD	1,000,000	100,000	

# Non-Deliverable Foreign Exchange Options

Summary:	This covers "Non-Deliverable Foreign Exchange Options".			
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards:			
	(a) the 1998 FX and Currency Option Definitions, as amended and supplemented from time to time, including the 2005 Barrier Option Supplement to the 1998 FX and Currency Option Definitions (the "1998 Definitions");			
	(b) the current EMTA Template Terms for Non- Deliverable Currency Option Transactions applicable to the Reference Currency and Settlement Currency (to the extent available for a particular Currency Pair) (available at: https://www.emta.org/ndftt.aspx); and			
	(c) ISDA OTC Taxonomies.			
Contract Types:	Each Non-Deliverable Foreign Exchange Option traded is bespoke and the terms agreed between the Buyer and Seller. All option strategies result in call options and/or put options executed with the following strategies traded as agreed between the parties:			
	Vanilla: Outright Call / Put, Straddle, Strangle, Butterfly, Risk Reversal, Calendar (tenor) spread, Cross Currency Spread, Condor, Call Spread, Put Spread, Live Trading with no delta hedge.			
	Exotic: Barriers, Baskets, Digitals (or Binary), Knockins, Knockouts, Reverse Knockins/Kockouts, No Touch, Double No Touch, Average Price, Worst of Options, Compound Options; trades may be with or without delta hedges and some structures may also be bilaterally negotiated with additional options as part of the package to form a vega hedge.			
Product Type/ISDA OTC Taxonomy:				
ISDA OTC Asset Class:	Foreign Exchange			
ISDA OTC Base Product:	Vanilla Option, NDO, Simple Exotic or Complex Exotic			
Terms:				
Trade Date:	The date the transaction is agreed between and becomes legally binding on the parties.			
Commencement Date:	The Trade Date, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.			
Buyer:	As specified by the parties.			
Seller:	As specified by the parties.			

Currency Option Style:	As specified by the parties.
	(An American option can be exercised any time up to and including the Expiration Date; a European option can only be exercised on the Expiration Date.)
Currency Option Type:	A Call with respect to the Call Currency and a Put with respect to the Put Currency; Binary in the case of a binary or digital option.
Call Currency:	The currency as specified by the parties from among those included in the list of available Currency Pairs.
	The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.
Call Currency Amount:	As specified by the parties or, if not so specified, derived from the Put Currency Amount and Strike Price.
Put Currency:	The currency as specified by the parties from among those included in the list of available Currency Pairs.
	The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.
Put Currency Amount:	As specified by the parties or, if not so specified, derived from the Call Currency Amount and Strike Price.
Strike Price:	As specified by the parties (if only one of the Put Currency or Call Currency is specified).
	If no Strike Price is specified and Automatic Exercise is applicable, the Strike Price will be calculated using the Put Currency and Call Currency in order to determine if the option is to be automatically exercised.
Reference Currency:	As specified by the parties.
Settlement Currency:	As specified by the parties.
Settlement Rate:	As specified by the parties or otherwise per the 1998 Definitions.
Settlement Rate Option:	As specified by the parties.
Expiration Date:	As specified by the parties.
Expiration Time:	The time in the location specified by the parities.
Latest Exercise Time:	The Expiration Time, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.
Automatic Exercise:	Applicable, unless otherwise specified by the parties.
Settlement:	Non-Deliverable
Settlement Amount:	In the case of a digital or binary option, as specified by the parties.
Settlement Date:	As specified by the parties.
Valuation Date:	As specified by the parties.

Averaging Dates:	As specified by the parties.
Premium:	As specified by the parties.
Premium Payment Date:	As specified by the parties.
Barrier Event:	As specified by the parties.
Calculation Agent:	As specified by the parties.
Business Day:	As specified by the parties.
Business Day Convention:	As specified by the parties.
Disruption Events:	As specified by the parties.
Disruption Fallbacks:	As specified by the parties for each applicable Disruption Event or otherwise per the 1998 Definitions.

Non-Deliverable Foreign Exchange Option Available Currency Pairs

CNY/THB	IDR/PHP	MYR/CNH	THB/INR
CNY/TWD	IDR/THB	MYR/CNY	THB/KRW
EUR/ARS	IDR/TWD	MYR/EUR	THB/MYR
EUR/BRL	INR/AUD	MYR/GBP	THB/PHP
EUR/CLP	INR/CAD	MYR/IDR	THB/TWD
EUR/CNY	INR/CHF	MYR/INR	TWD/AUD
EUR/COP	INR/CNH	MYR/JPY	TWD/CAD
EUR/IDR	INR/CNY	MYR/KRW	TWD/CHF
EUR/INR	INR/EUR	MYR/NZD	TWD/CNH
EUR/KRW	INR/GBP	MYR/PHP	TWD/CNY
EUR/KZT	INR/HKD	MYR/SGD	TWD/EUR
EUR/MYR	INR/IDR	MYR/TWD	TWD/GBP
EUR/PEN	INR/JPY	NZD/CNY	TWD/HKD
EUR/PHP	INR/KRW	NZD/IDR	TWD/IDR
EUR/TWD	INR/NZD	NZD/INR	TWD/INR
EUR/UAH	INR/PHP	NZD/KRW	TWD/JPY
GBP/BRL	INR/SGD	NZD/MYR	TWD/KRW
GBP/CNY	INR/TWD	NZD/PHP	TWD/MYR
GBP/IDR	JPY/CNY	NZD/TWD	TWD/NZD
GBP/INR	JPY/IDR	PHP/AUD	TWD/PHP
GBP/KRW	JPY/INR	PHP/CAD	TWD/SGD
GBP/MYR	JPY/KRW	PHP/CHF	TWD/THB
GBP/PHP	JPY/MYR	PHP/CNH	USD/ARS
GBP/TWD	JPY/PHP	PHP/CNY	USD/BRL
	CNY/TWD           EUR/ARS           EUR/BRL           EUR/CLP           EUR/CNY           EUR/CNY           EUR/CNY           EUR/CNY           EUR/CNY           EUR/CNY           EUR/CNY           EUR/COP           EUR/COP           EUR/IDR           EUR/INR           EUR/KRW           EUR/KRY           EUR/MYR           EUR/PEN           EUR/PHP           EUR/UAH           GBP/BRL           GBP/IDR           GBP/INR           GBP/INR           GBP/KRW           GBP/MYR           GBP/PHP	CNY/TWDIDR/THBEUR/ARSIDR/TWDEUR/BRLINR/AUDEUR/CLPINR/CADEUR/CNYINR/CHFEUR/COPINR/CNHEUR/IDRINR/CNYEUR/IDRINR/CNYEUR/INRINR/GBPEUR/KRWINR/GBPEUR/KRWINR/IDREUR/MYRINR/IDREUR/PENINR/IDREUR/PENINR/IDREUR/TWDINR/NZDEUR/UAHINR/PHPGBP/BRLINR/TWDGBP/IDRJPY/CNYGBP/INRJPY/INRGBP/MYRJPY/KRWGBP/PHPJPY/KRW	CNY/TWDIDR/THBMYR/CNYEUR/ARSIDR/TWDMYR/EUREUR/ARSIDR/TWDMYR/GBPEUR/BRLINR/AUDMYR/IDREUR/CLPINR/CADMYR/INREUR/CNYINR/CHFMYR/INREUR/COPINR/CNHMYR/XRWEUR/IDRINR/CNYMYR/KRWEUR/IDRINR/CNYMYR/SGDEUR/INRINR/BPMYR/PHPEUR/KZTINR/IDRMYR/SGDEUR/PENINR/IDRMYR/SGDEUR/PENINR/IDRMYR/TWDEUR/PENINR/IDRNZD/CNYEUR/UAHINR/NZDNZD/INREUR/UAHINR/SGDNZD/INRGBP/CNYINR/TWDNZD/KRWGBP/IDRJPY/INRPHP/AUDGBP/INRJPY/INRPHP/CADGBP/KRWJPY/KRWPHP/CHFGBP/PHPJPY/MYRPHP/CNH

CHF/TWD	HKD/CNY	JPY/TWD	PHP/EUR	USD/CLP
CNH/IDR	HKD/IDR	KRW/AUD	PHP/GBP	USD/CNY
CNH/INR	HKD/INR	KRW/CAD	PHP/HKD	USD/COP
CNH/KRW	HKD/KRW	KRW/CHF	PHP/IDR	USD/EGP
CNH/MYR	HKD/MYR	KRW/CNH	PHP/INR	USD/GHS
CNH/PHP	HKD/PHP	KRW/CNY	PHP/JPY	USD/IDR
CNH/TWD	HKD/TWD	KRW/EUR	PHP/KRW	USD/INR
CNY/AUD	IDR/AUD	KRW/GBP	PHP/MYR	USD/KES
CNY/CAD	IDR/CAD	KRW/IDR	PHP/NZD	USD/KRW
CNY/CHF	IDR/CHF	KRW/INR	PHP/THB	USD/KZT
CNY/EUR	IDR/CNH	KRW/JPY	PHP/TWD	USD/MYR
CNY/GBP	IDR/CNY	KRW/MYR	SGD/CNY	USD/NGN
CNY/HKD	IDR/EUR	KRW/NZD	SGD/IDR	USD/PEN
CNY/IDR	IDR/GBP	KRW/PHP	SGD/INR	USD/PHP
CNY/INR	IDR/HKD	KRW/SGD	SGD/KRW	USD/RUB
CNY/JPY	IDR/INR	KRW/THB	SGD/MYR	USD/TWD
CNY/KRW	IDR/JPY	KRW/TWD	SGD/PHP	USD/UAH
CNY/MYR	IDR/KRW	MYR/AUD	SGD/TWD	USD/VND
CNY/NZD	IDR/MYR	MYR/CAD	THB/CNY	USD/ZMW
CNY/PHP	IDR/NZD	MYR/CHF	THB/IDR	

# Non-Deliverable Forward Foreign Exchange Contracts

Summary:	A non-deliverable forward ("NDF") is an outright forward in which the counterparties settle the difference between the contracted NDF price or rate and the prevailing spot price or rate on an agreed notional amount in an agreed settlement currency.	
Reference Currency	AOA Angolan Kwanza	
( <i>i.e.</i> , Non-Delivery Currency):	ARS Argentine Peso	
	• BDT Bangladeshi Taka	
	BRL Brazilian Real	
	CLP Chilean Peso	
	COP Colombian Peso	
	CNY Chinese Renminbi	
	DZD Algerian Dinar	
	• EGP Egyptian pound	
	GHS Ghanaian Cedi	
	• GTQ Guatemalan quetzal	
	• IDR Indonesian Rupiah	
	• INR Indian Rupee	
	KES Kenyan Shilling	
	KRW South Korean Won	
	• KZT Kazakh tenge	
	LKR Sri Lankan Rupee	
	MAD Moroccan Dirham	
	• MUR Mauritian Rupee	
	MYR Malaysian Ringgit	
	MZN Mozambican Metical	
	NGN Nigerian Naira	
	• PEN Peruvian nuevo sol	
	PHP Philippine Peso	
	PKR Pakistani Rupee	
	• RUB Russian ruble	
	TND Tunisian Dinar	
	• TWD Taiwan Dollar	
	TZS Tanzanian Shilling	
	• UAH Ukrainian Hryvnia	

	UGX Ugandan Shilling	
	UYU Uruguayan peso	
	VEB Venezuelan bolívar	
	VND Vietnamese đồng	
	XAF Central African CFA Franc	
	XOF West African CFA Franc	
	ZMW Zambian Kwacha	
Settlement Currency:	AUD Australian Dollar	
	CAD Canadian Dollar	
	• EUR Euro	
	GBP British Pound	
	• JPY Japanese Yen	
	• USD US Dollar	
	CHF Swiss Franc	
Quoting Convention and Minimum Increment:	Notional amount, as agreed by counterparties.	
Minimum Size:	Notional amount, as agreed by counterparties.	
Notional Currency:	Currency in which contract size is expressed, as agreed by counterparties.	
Trading Conventions:	Buy or Sell which refers to the contract size expressed in notional currency.	
Forward Rates:	Currency exchange rate expressed as the amount of reference currency per unit of settlement currency.	
Trade Date:	The date on which parties enter into the contract.	
Settlement Date:	Specified settlement or payment date, as agreed by counterparties.	
Fixing Date:	The date at which the difference between the prevailing market exchange rate and the agreed upon exchange rate is calculated.	
Settlement Procedure:	Bilateral settlement performed in settlement currency.	
Disruption Events:	Unless otherwise specified by the parties, as set forth in the EMTA Template Terms for Non-Deliverable FX Forward Transactions applicable to the Reference Currency and Settlement Currency:	
	http://www.emta.org/ndftt.aspx	

# **PO Index Contracts**

Summary:	This covers Markit PO Fixed for Floating Swap Transactions (the "Contracts").	
Limitations on Available Selections and Default	The terms under which the Contracts may be traded are	
Settings:	as specified in these terms and conditions.	
Settings.	For amounts or rates, the relevant term cannot be less	
	than the specified Minimum, must represent an even	
	Increment and cannot exceed the Maximum; for a date,	
	the date cannot be earlier than Earliest nor later than	
	Latest.	
	In many cases there are normal "vanilla" terms on	
	which the parties will transact.	
	These are shown as "Default" and will apply unless the	
	parties vary them.	
Incorporated Standards:	This contract description incorporates by reference the	
-	following industry standard documentation and	
	standards:	
	(a) 2006 ISDA Definitions;	
	(b) ISDA OTC Taxonomies; and	
	(c) the Markit PO Standard Terms Supplement (June	
	12, 2010 version) or any subsequent Standard	
	Terms Supplement (the "Standard Terms").	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Credit	
ISDA OTC Base Product:	Index	
ISDA OTC Sub-Product:	PO	
ISDA OTC Transaction Type:	PO	
Further Limitations:	None	
Terms:		
Effective Date:	As specified by the parties, subject to adjustment in	
Scheduled Termination Dates	accordance with the Standard Terms.	
Scheduled Termination Date: Termination Date:	As agreed by the parties. Per the Standard Terms.	
Notional Amount:		
	An amount is USD agreed by the parties.	
Index:	One of the Markit PO Index series, as specified by the parties from all then-available series (to the extent such	
	series is not then a narrow-based index within the	
	meaning of the CFTC's regulations).	
Annex Date:	As agreed by the parties.	
Index Provider:	Per the Standard Terms.	
Fixed Rate Payer:	As agreed by the parties.	
Floating Rate Payer:	As agreed by the parties.	
Period End Dates:	Per the Standard Terms.	
Reset Dates:	Per the Standard Terms. Per the Standard Terms	
Payment Dates:	Per the Standard Terms.	
Calculation Agent:	As agreed by the parties or, if not so agreed, per the	
	Standard Terms.	
Day Count Fraction:	Per the Standard Terms.	
Business Days:	For any purpose, per the Standard Terms.	
Business Day Convention:	Per the Standard Terms.	
Initial Payment:		

Initial Payment:	Per the Standard Terms.	
Initial Payment Amount:	An amount in USD as specified by the parties.	
Initial Payment Payer:	As specified by the parties.	
Initial Payment Date:	Per the Standard Terms.	
Settlement Payments		
Mark to Market Amount Payment:	Per the Standard Terms.	
Mark to Market Amount Payer:	Per the Standard Terms.	
Mark to Market Amount:	Per the Standard Terms.	
Financing Payment:	Per the Standard Terms.	
Financing Payment Amount:	Per the Standard Terms.	
Principal Payment:	Per the Standard Terms.	
Principal Payment Amount:	Per the Standard Terms.	
Net Payment:	Per the Standard Terms.	
Net Payment Amount Payer:	Per the Standard Terms.	
Net Payment Amount:	Per the Standard Terms.	
Agency Coupon:	Per the Standard Terms.	
Index LIBOR:	Per the Standard Terms.	
Index Factor:	Per the Standard Terms.	
Commencing Index Factor:	Per the Standard Terms.	
Period End Index Factor:	Per the Standard Terms.	
Index Price:	Per the Standard Terms.	
Commencing Index Price:	Per the Standard Terms.	
Period End Index Price:	Per the Standard Terms.	
Event Affecting the Index:		
Events and Adjustments:	All are per the Standard Terms.	

# Single Currency Fixed for Floating Interest Rate Swaps - CME Cleared

Summary:	This covers single currency fixed for floating interest rate swaps cleared by the Chicago Mercantile Exchange Inc. ("CME").
Limitations on Available Selections and Default Settings:	<ul> <li>The terms under which a Single Currency Fixed for Floating Interest Rate Swap/CME Cleared may be traded are as specified in these terms and conditions, which incorporate the CME Rulebook, in particular Chapters 900 and 901 (and any successor provisions) and the CME Cleared IRS Product Scope (or any successor).</li> <li>By electing to trade a Single Currency Fixed for Floating Interest Rate Swap/CME Cleared, participants are representing that they are familiar with the CME Rulebook and the limitations on transaction terms contained in it.</li> </ul>
Incorporated Standards:	<ul> <li>This contract description incorporates by reference the CME Rulebook as in effect from time to time.</li> <li>The CME Rulebook itself may incorporate certain additional standards, such as the 2000 ISDA Definitions and 2006 ISDA Definitions.</li> <li>Be aware that the timing of effectiveness of amendments or supplements to the ISDA standards may vary between bilateral and CME contracts, since the CME may reserve the right to select when and how such changes become effective.</li> </ul>
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product(s):	Fixed Float and OIS
Further Limitations:	Must comply with CME Clearing Requirements.
Terms:	
Definition Set: Effective Date:	The definition set ( <i>e.g.</i> , ISDA 2000/ISDA2006) elected by, or otherwise binding on, the parties in accordance with the CME Rulebook.
Notional Amount:	As per the CME Rulebook.An amount in Currency determined by the partiessubject to limitations in the CME Rulebook.This may vary from period to period to the extentpermitted by the CME Rulebook.The CME Rulebook may limit the Currencies and
	Floating Rate Options for which variable notionals are permitted.
Currency:	
Currency: Business Days:	permitted.           One of the currencies permitted for the relevant
•	permitted.         One of the currencies permitted for the relevant transaction type per the CME Rulebook.         As per the CME Rulebook, which may require certain Business Days be applicable on a per Currency or Floating Rate Option Basis and may otherwise limit the

Termination Date:	As agreed by the parties, subject to any minimum or	
	maximum tenor in the CME Rulebook.	
Termination Date Business Day Convention:	As per the CME Rulebook, and thus subject to	
	limitations based on other terms of the transaction.	
Stub Periods:	Permitted to the extent allowed under the CME	
	Rulebook.	
Fixed Rate Payer Payment Dates:	As per the CME Rulebook.	
Fixed Amount:	As per the CME Rulebook, which may permit use of a schedule.	
Fixed Rate:	As agreed by the parties, subject to any minimum or maximum rate and per-period variability permitted in	
	the CME Rulebook.	
Floating Rate Payer Payment Dates:	As per the CME Rulebook.	
Floating Amount:	As per the CME Rulebook.	
Floating Rate Option:	As determined by the parties, subject to the CME	
	Rulebook, which may provide a more limited list of	
	available options for a Currency than does the	
	Definition Set.	
Designated Maturity:	As per the CME Rulebook, which may provide a more	
	limited set of Designated Maturities than does the	
	related rate source page.	
Spread:	Subject to any minimum or maximum rate and per-	
	period variability permitted by the CME Rulebook.	
Reset Dates:	As the per CME Rulebook.	
Floating Rate Daycount Fraction:	As per the CME Rulebook.	
Floating Rate for Initial Calculation Period:	As per the CME Rulebook.	
Fixed Rate Payer:	As determined by the parties.	
Floating Rate Payer:	As determined by the parties.	
Compounding:	As per the CME Rulebook.	
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitations in the CME Rulebook.	
Additional Payment/Fees:	As determined by the parties, subject to limitations in the CME Rulebook.	
Payment Date for Additional Payment/Fees	As determined by the parties, subject to limitations in the CME Rulebook.	

# Single Currency Fixed for Floating Interest Rate Swaps – LCH Cleared

Summary:	This covers single currency fixed for floating swaps cleared by LCH.Clearnet ("LCH").	
Limitations on Available Selections and Default Settings:	The terms under which a Single Currency Fixed for Floating Interest Rate Swaps/LCH Cleared contract may be traded are as specified in these terms and conditions,	
	which incorporate the LCH Rulebook, in particular	
	Schedule 4A (or any successor provisions).	
	By electing to trade a Single Currency Fixed for Floating Interest Rate Swap/LCH Cleared,	
	participants are representing that they are familiar	
	with the LCH Rulebook and the limitations on	
	transaction terms contained in it.	
Incorporated Standards:	This contract description incorporates by reference the LCH Rulebook as in effect from time to time.	
	The LCH Rulebook itself may incorporate certain	
	additional standards, such as the 2000 ISDA Definitions	
	and 2006 ISDA Definitions.	
	Be aware that the timing of effectiveness of	
	amendments or supplements to the ISDA standards	
	may vary between bilateral and LCH contracts, since	
	the LCH may reserve the right to select when and how	
	such changes become effective.	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Interest Rate	
ISDA OTC Base Product:	IR Swap	
ISDA OTC Sub-Product(s):	Fixed Float and OIS	
Further Limitations:	Must comply with LCH Clearing Requirements	
Terms:		
Definition Set:	The definition set (e.g., ISDA 2000/ISDA 2006) elected	
	by, or otherwise binding on, the parties in accordance with the LCH Rulebook.	
Notional Amount:	An amount in Currency determined by the parties subject	
Notional Amount.	to limitations in the LCH Rulebook.	
	This may vary from period to period to the extent	
	permitted by the LCH Rulebook.	
	The LCH Rulebook may limit the Currencies and Floating	
	Rate Options for which variable notionals are permitted.	
Currency:	One of the currencies permitted for the relevant	
-	transaction type per the LCH Rulebook.	
Trade Date:	As per the LCH Rulebook.	
Effective Date:	As per the LCH Rulebook.	
Termination Date:	As agreed by the parties, subject to any minimum or maximum tenor in the LCH Rulebook.	
Payer for Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook.	
Additional Payment/Fees:	As determined by the parties, subject to limitations in the LCH Rulebook	
Payment Date for Additional Payment/Fees	As determined by the parties, subject to limitations in the LCH Rulebook, which may limit the earliest or latest day	
	on which such fees may be paid based on Currency or other factors.	

Business Days:	As per the LCH Rulebook, which may require certain Business Days be applicable on a per Currency or Floating Rate Option Basis and may otherwise limit the available	
	Business Day locations which can be elected.	
Business Day Convention:	As per the LCH Rulebook.	
Stub Periods:	Permitted to the extent allowed under the LCH Rulebook.	
Fixed Rate Payer:	As determined by the parties.	
Fixed Rate Payer Payment Dates:	As per the LCH Rulebook.	
Fixed Amount:	As per the LCH Rulebook, which may permit use of a schedule.	
Fixed Rate:	As agreed by the parties, subject to any minimum or maximum rate and per-period variability permitted in the LCH Rulebook.	
Floating Rate Payer	As determined by the parties.	
Floating Rate Payer Payment Dates:	As per the LCH Rulebook.	
Floating Rate Payer Compounding Dates:	As per the LCH Rulebook.	
Floating Amount:	As per the LCH Rulebook.	
Floating Rate Option:	As determined by the parties, subject to the LCH Rulebook, which may provide a more limited list of available options for a Currency than does the Definition Set.	
Designated Maturity:	As per the LCH Rulebook, which may provide a more limited set of Designated Maturities than does the related rate source page.	
Spread:	Subject to any minimum or maximum rate and per-period variability permitted by the LCH Rulebook.	
Reset Dates:	As the per LCH Rulebook.	
Floating Rate Daycount Fraction:	As per the LCH Rulebook.	
Negative Interest Rates:	As per the LCH Rulebook, which may require use of a single method.	
Withholding and Tax:	As per the LCH Rulebook.	
Governing Law:	As per the LCH Rulebook, which may dictate the law applicable to the Transaction.	

# U.S. Electricity – Fixed/Floating Swap Contracts

Summary:	This covers fixed-for-floating U.S. electricity swaps ("U.S. Electricity – Fixed/Floating Swap Contracts").	
Limitations on Available Selections and Default Settings:	<ul> <li>The terms under which U.S. Electricity – Fixed/Floatin</li> <li>Swap Contracts may be traded are shown below or in the attached tables.</li> <li>For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</li> <li>In many cases there are normal "vanilla" terms on which the parties will transact.</li> <li>These are shown as "Default" and will apply unless the parties vary them.</li> </ul>	
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards: 2005 ISDA Commodity Derivatives Definitions ("Commodity Definitions")	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Commodity	
ISDA OTC Base Product:	Energy	
ISDA OTC Sub-Product:	Elec	
ISDA OTC Transaction type:	Swap	
Further Limitations:	None	
Terms:		
Trade Date:	As agreed by the parties.	
Effective Date:	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention.	
Effective Date Business Days:	USNY	
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.	
Termination Date:	As specified by the parties.	
Termination Date Business Days:	USNY	
Termination Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.	
Commodity	As specified by the parties from among the Available Commodities.	
Notional Quantity:	The sum of the Notional Quantities per Calculation Period.	
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period Basis.	
Settlement Periods:	If specified by the parties or if applicable to the relevant Commodity Reference Price and specified herein. Parties may specify one of the Available Set Tenors as a Settlement Period or may specify another period.	

Applicable Days: Duration: Start Time(s)/End Time(s):	If applicable to the relevant Commodity Reference Price and specified therein or if applicable to the relevant Available Set Tenor and specified therein (i.e., Month). Applicable Days does not apply to Commodity Reference Prices under the headings "ISDA Definition" or "Exchange Definition".HourlyIf specified by the parties or if applicable to the relevant Commodity Reference Price and specified herein.	
Payment Dates:	In relation to each Calculation Period, as specified by the parties, each such day being subject to adjustment in accordance with the Payment Date Business Day Convention.	
Payment Date Business Days:	USNY	
Payment Date Business Day Convention:	As specified by the parties.	
Fixed Amount:		
Fixed Price Payer:	As specified by the parties.	
Fixed Price or Fixed Amount:	As specified by the parties per Unit of the Commodity.	
Floating Amount:		
Floating Price Payer:	As specified by the parties.	
Applicable Spread:	As specified by the parties.	
Commodity Reference Price:	As specified by the parties from among the Available Commodity Reference Prices.	
Market Disruption:		
Market Disruption Events:	Unless otherwise specified by the parties, per the Commodity Definitions.	
Additional Market Disruption Events:	As specified by the parties.	
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the Commodity Definitions.	
Disruption Fallbacks:	Unless otherwise specified by the parties, per the Commodity Definitions.	
Fallback Reference Price:	None, unless specified by the parties.	
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the Commodity Definitions.	
Calculation Agent:	As agreed by the parties.	

U.S. Electricity - Fixed/Floating Swap Contracts Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY

U.S. Electricity - Fixed/Floating Swap Contracts Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

Set Tenor	Settle	Settlement Period		
Month	The specified calendar month; if OFF PEAK/PEAK is			
	not specified, PEAK is a	assumed		
Season	Season	Days in Specified Year		
	Winter	1 January through the last		
		day of February in the		
		specified year		
	Spring	1 March through 30 April		
		in the specified year		
	Summer	1 July through 31 August		
		in the specified year		
Quarter	Quarter Number	Days in Specified Year		
	Q1	1 January through 31		
		March		
	Q2	1 April through 30 June		
	Q3	1 July through 30		
		September		
	Q4	1 October through 31		
		December		
Calendar Year	1 January through 31 D	1 January through 31 December in the specified year		
Planning Year	1 June in the specified b	eginning calendar year through		
-	31 May in the specified	<i>c c c</i>		

#### U.S. Electricity - Fixed/Floating Swap Contracts Available Set Tenors

U.S. Electricity - Fixed/Floating Swap Contracts Available Commodity Reference Prices

#### **ISDA Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions.

Note that these Commodity Reference Prices relate to all hours in the Pricing Date (i.e., are "Around the Clock"); for the equivalent Peak and Off-Peak prices, see below.

ISDA Definition
ELECTRICITY-NYISO-ZONE A (WEST)-DAY AHEAD
ELECTRICITY-NYISO-ZONE G (HUD VL)-DAY AHEAD
ELECTRICITY-NYISO-ZONE J (N.Y.C.)-DAY AHEAD
ELECTRICITY-ISO NEW ENGLAND-MASS HUB-DAY AHEAD
ELECTRICITY-ISO NEW ENGLAND-NE MASS BOSTON-DAY AHEAD
ELECTRICITY-PJM-EASTERN HUB-DAY AHEAD
ELECTRICITY-PJM-PSEG-DAY AHEAD
ELECTRICITY-PJM-WESTERN HUB-DAY AHEAD

#### **Exchange Definitions**

The following Commodity Reference Prices are as defined in Sub-Annex A to the Commodity Definitions. Note that these Commodity Reference Prices relate to all hours in the Pricing Date (i.e., are "Around the Clock"); for the equivalent Peak and Off-Peak prices, see below.

ISDA Definition						
Commodity	Commodity Relevant Relevant Unit Exchange Currency Specified Price					
Reference	Commodity					

Price					
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	"ELECTRICIT
-NP15 DAY	-				Y-CAISO-
AHEAD PEAK-					NP15-DAY
ICE					AHEAD"
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	"ELECTRICIT
-NP15 DAY					Y-CAISO-
AHEAD PEAK-					NP15-DAY
ICE					AHEAD"
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	"ELECTRICIT
-SP15 DAY					Y-CAISO-
AHEAD OFF					SP15-DAY
PEAK-ICE					AHEAD"
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	"ELECTRICIT
-SP15 DAY					Y-CAISO-
AHEAD PEAK-					SP15-DAY
ICE					AHEAD"
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	ELECTRICITY
-PALO VERDE					-PALO VERDE
OFF PEAK-ICE					OFF-PEAK-
					ICE
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	ELECTRICITY
-PALO VERDE					-PALO VERDE
PEAK-ICE					PEAK-ICE
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	ELECTRICITY
-MID C OFF					-MID C OFF-
PEAK-ICE					PEAK-ICE
ELECTRICITY	Electricity	MwH	ICE	USD 0.01	ELECTRICITY
-MID C PEAK-					-MID C PEAK-
ICE					ICE

#### Non-ISDA, Non-Exchange Definitions

For any of the Commodity Reference Prices below, the price for the Settlement Period specified for that Pricing Date will be that hour's Specified Price per MWh of electricity for delivery on an Applicable Day specified for that Commodity Reference Price, published by the specified Source on the specified Page under the specified Heading (or any successor Source, Page or Heading), that reports prices effective on such Applicable Day.

Commodity	Settlement	Source	Page	Heading
<b>Reference Price</b>	Period			
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP			operations/energy/day-	HUB, TotalLMP
DAYTON HUB-			ahead/lmpda.aspx	
ATC DAY				
AHEAD				
ELECTRICITY-	Eastern Off	PJM	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP	Peak		operations/energy/day-	HUB, TotalLMP
DAYTON HUB-			ahead/lmpda.aspx	
OFF PEAK				
DAY AHEAD				

				1
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP	Peak		operations/energy/day-	HUB, TotalLMP
DAYTON HUB-			ahead/Impda.aspx	,
OFF PEAK			I I I I I I I I I I I I I I I I I I I	
DAY AHEAD				
	NT/A	DIM	http://www.aim.com/woorleate.ord	
ELECTRICITY-	N/A	РЈМ	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP			operations/energy/real-time/lmp.aspx	HUB, TotalLMP
DAYTON HUB-				
ATC				
REALTIME				
ELECTRICITY-	Eastern Off	РЈМ	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP	Peak		operations/energy/real-time/lmp.aspx	HUB, TotalLMP
DAYTON HUB-				- ,
OFF PEAK				
REAL TIME				
	<b>D</b> .	DD (		
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	AEP DAYTON
PJM-AEP	Peak		operations/energy/real-time/lmp.aspx	HUB, TotalLMP
DAYTON HUB-				
OFF PEAK				
REAL TIME				
ELECTRICITY-	N/A	РЈМ	http://www.pjm.com/markets-and-	COMED,
PJM-COMED			operations/energy/day-	TotalLMP
HUB-ATC DAY			ahead/Impda.aspx	1000000000
AHEAD			anead/impaa.aspx	
ELECTRICITY-	Eastern Off	РЈМ	http://www.aim.com/woorleate.ord	COMED
		PJIVI	http://www.pjm.com/markets-and-	COMED,
PJM-COMED	Peak		operations/energy/day-	TotalLMP
HUB-OFF			ahead/lmpda.aspx	
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	COMED,
PJM-COMED	Peak		operations/energy/day-	TotalLMP
HUB-OFF			ahead/lmpda.aspx	
PEAK DAY				
AHEAD				
ELECTRICITY-	N/A	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-	1 1/2 1	MISO	rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)
INDIANA HUB-				rices (\$ per wiw)
			(Report Type: Day-Ahead, Report:	
ATC DAY			Name: Day Ahead Pricing (pdf))	
AHEAD				
ELECTRICITY-	Eastern Off	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-	Peak		rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)
INDIANA HUB-			(Report Type: Day-Ahead, Report:	
OFF PEAK			Name: Day Ahead Pricing (pdf))	
DAY AHEAD				
ELECTRICITY-	Eastern	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-	Peak		rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)
INDIANA HUB-	1 Cun		(Report Type: Day-Ahead, Report:	
PEAK DAY			Name: Day Ahead Pricing (pdf))	
			Name. Day Aneau Pricing (pur))	
AHEAD			1	
ELECTRICITY-	N/A	MISO	https://www.misoenergy.org/Library/Ma	Indiana Hub, LMP
MISO-			rketReports/Pages/MarketReports.aspx	Prices (\$ per MW)
INDIANA HUB-			(Report Type: Real -Time, Report: Real-	
ATC REAL			Time Pricing (pdf))	
TIME				
L				

ELECTRICITY- MISO- INDIANA HUB- OFF PEAK REAL TIME	Eastern Off Peak	MISO	https://www.misoenergy.org/Library/Ma rketReports/Pages/MarketReports.aspx (Report Type: Real -Time, Report: Real- Time Pricing (pdf))	Indiana Hub, LMP Prices (\$ per MW)
ELECTRICITY- MISO- INDIANA HUB- PEAK REAL TIME	Eastern Peak	MISO	https://www.misoenergy.org/Library/Ma rketReports/Pages/MarketReports.aspx (Report Type: Real -Time, Report: Real- Time Pricing (pdf))	Indiana Hub, LMP Prices (\$ per MW)
ELECTRICITY- MISO- MICHIGAN HUB-ATC DAY AHEAD	N/A	MISO	https://www.misoenergy.org/Library/Ma rketReports/Pages/MarketReports.aspx (Report Type: Day-Ahead, Report: Name: Day Ahead Pricing (pdf))	Michigan Hub, LMP Prices (\$ per MW)
ELECTRICITY- MISO- MICHIGAN HUB-OFF PEAK DAY AHEAD	Central Off Peak	MISO	https://www.misoenergy.org/Library/Ma rketReports/Pages/MarketReports.aspx (Report Type: Day-Ahead, Report: Name: Day Ahead Pricing (pdf))	Michigan Hub, LMP Prices (\$ per MW)
ELECTRICITY- MISO- MICHIGAN HUB-PEAK DAY AHEAD	Central Peak	MISO	https://www.misoenergy.org/Library/Ma rketReports/Pages/MarketReports.aspx (Report Type: Day-Ahead, Report: Name: Day Ahead Pricing (pdf))	Michigan Hub, LMP Prices (\$ per MW)
ELECTRICITY- MISO- NORTHERN ILLINOIS HUB- ATC DAY AHEAD	N/A	РЈМ	http://www.pjm.com/markets-and- operations/energy/day- ahead/lmpda.aspx	N ILLINOIS HUB, TotalLMP
ELECTRICITY- MISO- NORTHERN ILLINOIS HUB- OFF PEAK DAY AHEAD	Central Off Peak	РЈМ	http://www.pjm.com/markets-and- operations/energy/day- ahead/lmpda.aspx	N ILLINOIS HUB, TotalLMP
ELECTRICITY- MISO- NORTHERN ILLINOIS HUB- PEAK DAY AHEAD	Central Peak	РЈМ	http://www.pjm.com/markets-and- operations/energy/day- ahead/lmpda.aspx	N ILLINOIS HUB, TotalLMP
ELECTRICITY- MISO- NORTHERN ILLINOIS HUB- ATC REAL TIME	N/A	РЈМ	http://www.pjm.com/markets-and- operations/energy/real-time/lmp.aspx	N ILLINOIS HUB, TotalLMP

ELECTRICITY- MISO- NORTHERN ILLINOIS HUB- OFF PEAK REAL TIME	Central Off Peak	РЈМ	http://www.pjm.com/markets-and- operations/energy/real-time/lmp.aspx	N ILLINOIS HUB, TotalLMP
ELECTRICITY- MISO- NORTHERN ILLINOIS HUB- PEAK REAL TIME	Central Peak	РЈМ	http://www.pjm.com/markets-and- operations/energy/real-time/lmp.aspx	N ILLINOIS HUB, TotalLMP
ELECTRICITY- ISO NEW ENGLAND- CONNECTICU T ZONE-ATC DAY AHEAD	N/A	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.CONNECTICUT , Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- CONNECTICU T ZONE-OFF PEAK DAY AHEAD	Eastern Off Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.CONNECTICUT , Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- CONNECTICU T ZONE-PEAK DAY AHEAD	Eastern Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.CONNECTICUT , Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- ATC DAY AHEAD	N/A	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- OFF PEAK DAY AHEAD	Eastern Off Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- PEAK DAY AHEAD	Eastern Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- ATC DAY AHEAD	N/A	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh

ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- OFF PEAK	Eastern Off Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
DAY AHEAD ELECTRICITY- ISO NEW ENGLAND- MAINE ZONE- PEAK DAY AHEAD	Eastern Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.MAINE, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MASS HUB- ATC DAY AHEAD	See ISDA Do	efinition		<u></u>
ELECTRICITY- ISO NEW ENGLAND- MASS HUB- OFF PEAK DAY AHEAD	Eastern Off Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.H.INTERNAL_HU B, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- MASS HUB- PEAK DAY AHEAD	Eastern Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.H.INTERNAL_HU B, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- SEMASS ZONE-DAY AHEAD	N/A	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.SEMASS, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- SEMASS ZONE-OFF PEAK DAY AHEAD	Eastern Off Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.SEMASS, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- SEMASS ZONE-PEAK DAY AHEAD	Eastern Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat egory=Hourly Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	.Z.SEMASS, Locational Marginal Pricing \$/MWh
ELECTRICITY- ISO NEW ENGLAND- NEMASSBOST ZONE-DAY AHEAD	See ISDA Do	efinition		

ELECTRICITY- ISO NEW	Eastern Off Peak	ISO NE	http://www.iso- ne.com/markets/hst_rpts/hstRpts.do?cat	.Z.NEMASSBOST, Locational
ENGLAND-	1 Cur		egory=Hourly	Marginal Pricing
NEMASSBOST			Report Type: Hourly Data; Report Day-	\$/MWh
ZONE-OFF			Ahead LMPs (March 2003 - Present)	
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	ISO NE	http://www.iso-	.Z.NEMASSBOST,
ISO NEW	Peak		ne.com/markets/hst_rpts/hstRpts.do?cat	Locational
ENGLAND-			egory=Hourly	Marginal Pricing
NEMASSBOST			Report Type: Hourly Data; Report Day-	\$/MWh
ZONE-PEAK			Ahead LMPs (March 2003 - Present)	
DAY AHEAD				
ELECTRICITY-	N/A	ISO NE	http://www.iso-	.Z.WCMASS,
ISO NEW			ne.com/markets/hst_rpts/hstRpts.do?cat	Locational
ENGLAND-			egory=Hourly	Marginal Pricing
WCMASS			Report Type: Hourly Data; Report Day-	\$/MWh
ZONE-DAY			Ahead LMPs (March 2003 - Present)	
AHEAD	Est Off	ICO NE		
ELECTRICITY-	Eastern Off	ISO NE	http://www.iso-	.Z.WCMASS, Locational
ISO NEW	Peak		ne.com/markets/hst_rpts/hstRpts.do?cat	
ENGLAND- WCMASS			egory=Hourly Benert Turney Hourly Date: Benert Day	Marginal Pricing \$/MWh
ZONE-OFF			Report Type: Hourly Data; Report Day- Ahead LMPs (March 2003 - Present)	\$/ 1 <b>V1 VV</b> 11
PEAK DAY			Allead LIMPS (March 2003 - Present)	
AHEAD				
ELECTRICITY-	Eastern	ISO NE	http://www.iso-	.Z.WCMASS,
ISO NEW	Peak	IDO ILE	ne.com/markets/hst_rpts/hstRpts.do?cat	Locational
ENGLAND-	I oun		egory=Hourly	Marginal Pricing
WCMASS			Report Type: Hourly Data; Report Day-	\$/MWh
ZONE-PEAK			Ahead LMPs (March 2003 - Present)	+, -, -,
DAY AHEAD				
ELECTRICITY-	N/A	РЈМ	http://www.pjm.com/markets-and-	AECO ZONE,
PJM-			operations/energy/day-	TotalLMP
ATLANTIC			ahead/lmpda.aspx	
ZONE-ATC				
DAY AHEAD				
ELECTRICITY-	Eastern Off	PJM	http://www.pjm.com/markets-and-	AECO ZONE,
PJM-	Peak		operations/energy/day-	TotalLMP
ATLANTIC			ahead/lmpda.aspx	
ZONE-OFF				
PEAK DAY				
AHEAD	Eastarr	РЈМ	http://www.pip.com/monlects.ond	
ELECTRICITY- PJM-	Eastern Peak	L'IM	http://www.pjm.com/markets-and- operations/energy/day-	AECO ZONE, TotalLMP
ATLANTIC	геак		ahead/Impda.aspx	
ZONE-PEAK			aneau/mpua.aspx	
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	BGE ZONE,
PJM-	- · · <b>·</b>		operations/energy/day-	TotalLMP
BALTIMORE			ahead/Impda.aspx	
GAS AND				
ELECTRIC				
ZONE-ATC				
DAY AHEAD				

	1			
ELECTRICITY-	Eastern Off	PJM	http://www.pjm.com/markets-and-	BGE ZONE,
PJM-	Peak		operations/energy/day-	TotalLMP
BALTIMORE			ahead/lmpda.aspx	
GAS AND				
ELECTRIC				
ZONE-OFF				
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	РЈМ	http://www.pjm.com/markets-and-	BGE ZONE,
PJM-	Peak	1 5111	operations/energy/day-	TotalLMP
BALTIMORE	I Cak		ahead/Impda.aspx	TotalLivii
GAS AND			aneau/mpua.aspx	
ELECTRIC				
ZONE-PEAK				
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	DPL ZONE,
PJM-DPL			operations/energy/day-	TotalLMP
ZONE-ATC			ahead/lmpda.aspx	
DAY AHEAD				
ELECTRICITY-	Eastern Off	PJM	http://www.pjm.com/markets-and-	DPL ZONE,
PJM-DPL	Peak		operations/energy/day-	TotalLMP
ZONE-OFF			ahead/lmpda.aspx	
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	РЈМ	http://www.pjm.com/markets-and-	DPL ZONE,
PJM-DPL	Peak	1 3171	operations/energy/day-	TotalLMP
ZONE-PEAK	I Cak		ahead/Impda.aspx	TotalLivii
			aneau/mpua.aspx	
DAY AHEAD	See ISDA De	<u> </u>		
ELECTRICITY-	See ISDA De	erinition		
PJM-EASTERN				
HUB-ATC DAY				
AHEAD		1		
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	EASTERN HUB,
PJM-EASTERN	Off-Peak		operations/energy/day-	TotalLMP
HUB-OFF			ahead/lmpda.aspx	
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	EASTERN HUB,
PJM-EASTERN	Peak		operations/energy/day-	TotalLMP
HUB- PEAK			ahead/Impda.aspx	
DAY AHEAD				
ELECTRICITY-	N/A	РЈМ	http://www.pjm.com/markets-and-	JCPL ZONE,
PJM-JCPL	11/11	1 3171	operations/energy/day-	TotalLMP
ZONE-ATC			ahead/Impda.aspx	
DAY AHEAD			aneau/ impua.aspx	
	Eastern Off		http://www.pinc.com/mac.il.com/	ICDI ZONE
ELECTRICITY-	Eastern Off	PJM	http://www.pjm.com/markets-and-	JCPL ZONE,
PJM-JCPL	Peak		operations/energy/day-	TotalLMP
ZONE-OFF			ahead/lmpda.aspx	
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	JCPL ZONE,
PJM-JCPL	Peak		operations/energy/day-	TotalLMP
ZONE-PEAK			ahead/Impda.aspx	
		1	· · ·	
DAY AHEAD				

ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	METED ZONE,
PJM-METED			operations/energy/day-	TotalLMP
ZONE-ATC			ahead/lmpda.aspx	
DAY AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	METED ZONE,
PJM-METED	Off-Peak		operations/energy/day-	TotalLMP
ZONE-OFF			ahead/lmpda.aspx	
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	METED ZONE,
PJM-METED	Peak	10111	operations/energy/day-	TotalLMP
ZONE-PEAK	I Cux		ahead/Impda.aspx	TotulLivii
DAY AHEAD			uneuu/mpuu.uspx	
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	PECO ZONE,
PJM-PECO	IN/A	I JIVI	operations/energy/day-	TotalLMP
				TOTALLIVIE
ZONE-ATC			ahead/lmpda.aspx	
DAY AHEAD	E t			
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PECO ZONE,
PJM-PECO	Off-Peak		operations/energy/day-	TotalLMP
ZONE-OFF			ahead/lmpda.aspx	
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PECO ZONE,
PJM-PECO	Peak		operations/energy/day-	TotalLMP
ZONE-PEAK			ahead/lmpda.aspx	
DAY AHEAD				
ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	PEPCO ZONE,
PJM-PEPCO			operations/energy/day-	TotalLMP
ZONE-ATC			ahead/lmpda.aspx	
DAY AHEAD			1 1	
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PEPCO ZONE,
PJM-PEPCO	Off-Peak		operations/energy/day-	TotalLMP
ZONE-OFF			ahead/Impda.aspx	100000000
PEAK DAY			unoud, impauluspri	
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	Fastern	PIM	http://www.pim.com/markets_and	PEPCO ZONE
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	1 Cak		1 00 0	
			ancau/ mpua.aspx	
	N/A	DIM	http://www.pim.com/markata.and	DDI ZONE
	IN/A	FJIVI		
				TOTALLIVIE
			anead/impda.aspx	
	<b>.</b>			
		PJM		
	Off-Peak			TotalLMP
			ahead/Impda.aspx	
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL	Peak		operations/energy/day-	TotalLMP
				1
ZONE-PEAK			ahead/lmpda.aspx	
ELECTRICITY- PJM-PEPCO ZONE-PEAK DAY AHEAD ELECTRICITY- PJM-PPL ZONE-ATC DAY AHEAD ELECTRICITY- PJM-PPL ZONE-OFF PEAK DAY AHEAD	Eastern Peak N/A Eastern Off-Peak	PJM PJM PJM	http://www.pjm.com/markets-and- operations/energy/day- ahead/lmpda.aspx         http://www.pjm.com/markets-and- operations/energy/day- ahead/lmpda.aspx         http://www.pjm.com/markets-and- operations/energy/day- ahead/lmpda.aspx	PEPCO ZONE, TotalLMP PPL ZONE, TotalLMP PPL ZONE, TotalLMP

ELECTRICITY-	N/A	PJM	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL			operations/energy/day-	TotalLMP
ZONE-ATC			ahead/lmpda.aspx	
DAY AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL	Off-Peak		operations/energy/day-	TotalLMP
ZONE-OFF			ahead/lmpda.aspx	
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AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PPL ZONE,
PJM-PPL	Peak	10111	operations/energy/day-	TotalLMP
ZONE-PEAK	1 cur		ahead/Impda.aspx	
DAY AHEAD			unoud/imput.uspx	
ELECTRICITY-	See ISDA De	finition		
PJM-PSEG	SCC ISDA DO			
ZONE-ATC				
DAY AHEAD	Destaurs	DIM		DEEC ZONE
ELECTRICITY-	Eastern	РЈМ	http://www.pjm.com/markets-and-	PSEG ZONE,
PJM-PSEG	Off-Peak		operations/energy/day-	TotalLMP
ZONE-OFF			ahead/lmpda.aspx	
PEAK DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	PSEG ZONE,
PJM-PSEG	Peak		operations/energy/day-	TotalLMP
ZONE-PEAK			ahead/lmpda.aspx	
DAY AHEAD				
ELECTRICITY-	See ISDA De	efinition		
PJM-WEST-				
ATC DAY				
AHEAD				
ELECTRICITY-	Eastern	PJM	http://www.pjm.com/markets-and-	WESTERN HUB,
PJM-WEST-OFF	Off-Peak		operations/energy/day-	TotalLMP
PEAK DAY			ahead/lmpda.aspx	
AHEAD			r r	
ELECTRICITY-	Eastern	РЈМ	http://www.pjm.com/markets-and-	WESTERN HUB,
PJM-WEST-	Peak	101/1	operations/energy/day-	TotalLMP
PEAK DAY	1 cur		ahead/Impda.aspx	
AHEAD			unoud/imput.uspx	
ELECTRICITY-	N/A	РЈМ	http://www.pjm.com/markets-and-	WESTERN HUB
PJM-WEST	11/21	I JIVI	operations/energy/real-time/lmp.aspx	HUB, TotalLMP
HUB-ATC			operations, energy, real-time, mip.aspx	
REALTIME				
	Eastern Off	РЈМ	http://www.pip.com/markets.and	WESTERN HUB
ELECTRICITY-		I'JIVI	http://www.pjm.com/markets-and-	
PJM-WEST	Peak		operations/energy/real-time/lmp.aspx	HUB, TotalLMP
HUB-OFF				
PEAK REAL				
TIME		DD4		
ELECTRICITY-	Eastern	РЈМ	http://www.pjm.com/markets-and-	WESTERN HUB
PJM-WEST	Peak		operations/energy/real-time/lmp.aspx	HUB, TotalLMP
HUB-OFF				
PEAK REAL				
TIME				

ELECTRICITY-	See ISDA De	finition		
NYISO-NY	See ISDA D			
ZONE A-ATC				
DAY AHEAD				
ELECTRICITY-	Eastern Off	NYISO	http://www.nyiso.com/public/markets_o	WEST, LBMP
NYISO-NY ZONE A-OFF	Peak		perations/market_data/pricing_data/inde	(\$/MWHr)
PEAK DAY			x.jsp (Report Type: Day-Ahead Market	
AHEAD			LBMP/Zonal)	
ELECTRICITY-	Eastern	NYISO	http://www.nyiso.com/public/markets_o	WEST, LBMP
NYISO-NY	Peak	111100	perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE A- PEAK	1 0000		x.jsp	(4,1,1,1,1,1,1)
DAY AHEAD			(Report Type: Day-Ahead Market	
			LBMP/Zonal)	
ELECTRICITY-	ATC	NYISO	http://www.nyiso.com/public/markets_o	WEST, LBMP
NYISO-NY			perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE A-ATC			x.jsp	
DAY AHEAD			(Report Type: Day-Ahead Market	
			LBMP/Zonal)	
ELECTRICITY-	Eastern Off	NYISO	http://www.nyiso.com/public/markets_o	WEST, LBMP
NYISO-NY	Peak		perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE A-OFF			x.jsp	
PEAK DAY AHEAD			(Report Type: Day-Ahead Market LBMP/Zonal)	
ELECTRICITY-	Eastern	NYISO	http://www.nyiso.com/public/markets_o	CENTRL, LBMP
NYISO-NY	Peak	NTISO	perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE A- PEAK	1 Curk		x.jsp	(φ/101001Π)
DAY AHEAD			(Report Type: Day-Ahead Market	
			LBMP/Zonal)	
ELECTRICITY-	ATC	NYISO	http://www.nyiso.com/public/markets_o	CENTRL, LBMP
NYISO-NY			perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE C-ATC			x.jsp	
DAY AHEAD			(Report Type: Day-Ahead Market	
ELECTRICITY-	Eastern Off	NYISO	LBMP/Zonal) http://www.nyiso.com/public/markets_o	CENTRL, LBMP
NYISO-NY	Peak	N 1150	perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE C-OFF	ТСак		x.jsp	(Φ/1 <b>VI VV III</b> )
PEAK DAY			(Report Type: Day-Ahead Market	
AHEAD			LBMP/Zonal)	
ELECTRICITY-	Eastern	NYISO	http://www.nyiso.com/public/markets_o	CENTRL, LBMP
NYISO-NY	Peak		perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE C- PEAK			x.jsp	
DAY AHEAD			(Report Type: Day-Ahead Market	
	a 165	<u> </u>	LBMP/Zonal)	
ELECTRICITY-	See ISDA De	etinition		
NYISO-NY				
ZONE G-ATC				
DAY AHEAD ELECTRICITY-	Eastern Off	NYISO	http://www.nyiso.com/public/markets_o	HUD VL, LBMP
NYISO-NY	Peak	11150	perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE G-OFF	I Cak		x.jsp	
PEAK DAY			(Report Type: Day-Ahead Market	
AHEAD			LBMP/Zonal)	
AHEAD			LBMP/Zonal)	

ELECTRICITY	Fastarr	NVICO	http://www.price.com/multic/market	
ELECTRICITY-	Eastern	NYISO	http://www.nyiso.com/public/markets_o	HUD VL, LBMP
NYISO-NY	Peak		perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE G- PEAK			x.jsp	
DAY AHEAD			(Report Type: Day-Ahead Market	
			LBMP/Zonal)	
ELECTRICITY-	See ISDA			
NYISO-NY	Definition			
ZONE H-ATC				
DAY AHEAD	The second		· · · · · · · · · · · · · · · · · · ·	
ELECTRICITY-	Eastern Off	NYISO	http://www.nyiso.com/public/markets_o	N.Y.C., LBMP
NYISO-NY	Peak		perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE H-OFF			x.jsp	
PEAK DAY			(Report Type: Day-Ahead Market	
AHEAD			LBMP/Zonal)	
ELECTRICITY-	Eastern	NYISO	http://www.nyiso.com/public/markets_o	N.Y.C., LBMP
NYISO-NY	Peak		perations/market_data/pricing_data/inde	(\$/MWHr)
ZONE H- PEAK			x.jsp	
DAY AHEAD			(Report Type: Day-Ahead Market	
			LBMP/Zonal)	
ELECTRICITY-	Notwithstanding the Commodity Definitions, will be calculated as the weighted average of			
CAISO-NP 15			PEAK-ICE and ELECTRICITY-NP15- OF	
ATC	Commodity Reference Prices for the relevant period, weighted on the basis of the number of			
	hourly periods in the relevant period which are peak and off-peak respectively (with peak and off peak having the meaning specified in the definition of the Commodity Reference			
			eaning specified in the definition of the Com	modity Reference
	Price by the			· 1 / 1 C
ELECTRICITY-			nodity Definitions, will be calculated as the	
CAISO-SP 15			PEAK-ICE and ELECTRICITY-SP15- OFI	
ATC			es for the relevant period, weighted on the b	
	hourly periods in the relevant period which are peak and off-peak respectively (with peak and off peak having the meaning specified in the definition of the Commodity Reference			
	and off peak having the meaning specified in the definition of the Commodity Reference			
ELECTRICITY-	Price by the Exchange). Notwithstanding the Commodity Definitions, will be calculated as the weighted average of			
	the ELECTRICITY-PALO VERDE PEAK-ICE and ELECTRICITY-PALO VERDE OFF-			
PALO VERDE ATC-ICE				
AIC-ICE	PEAK-ICE Commodity Reference Prices for the relevant period, weighted on the basis of			
	the number of hourly periods in the relevant period which are peak and off-peak respectively			
	(with peak and off peak having the meaning specified in the definition of the Commodity			
ELECTRICITY-	Reference Price by the Exchange) Notwithstanding the Commodity Definitions, will be calculated as the weighted average of			
MID C ATC-			C PEAK-ICE and ELECTRICITY-MID C O	
ICE			es for the relevant period, weighted on the b	
ICE			ant period which are peak and off-peak respe	
			caning specified in the definition of the Com	
	Price by the l		annig specified in the definition of the Com	infourty Reference
L	The by the	LACHANGE)		

U.S. Electricity – Fixed/Floating Swap Contracts Specified Time Periods

	Non-FERC Holidays (all times are	FERC Holidays
	Hours Ending and use 24-hour	
	clock)	
California Off Peak	Excludes 0700 through 2200 Pacific	Includes all hours on FERC
	Prevailing Time	Holidays
California Peak	Includes 0700 through 2200 Pacific	Excludes all hours on FERC
	Prevailing Time	Holidays
Eastern Off Peak	Prevailing Time es reported for Central Timezone (e.g., 1	illinois, Michigan) will be converted
to their Eastern time equivalents		

	Excludes 0800 through 2300	Includes all hours on FERC
	Eastern Prevailing Time	Holidays
Eastern Peak	Includes 0800 through 2300 Eastern	Excludes all hours on FERC
	Prevailing Time	Holidays

# USD Equity Basket Swap (Broad Based)

Summary:	This covers equity total-return swaps on broad-based baskets of equities traded in USD. For purposes of relevant CFTC and SEC regulations, such basket shall be on a broad-based index.	
Limitations on Available Selections and Default Settings:	<ul> <li>The terms under which USD Equity Basket Swap (Broad Based) may be traded are shown below or in the attached tables.</li> <li>For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</li> <li>For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.</li> <li>In many cases there are normal "vanilla" terms on which the parties will transact.</li> <li>These are shown as "Default " and will apply unless the parties vary them.</li> <li>In some cases, the same contract might have different terms depending on the market in which it is traded (<i>e.g.</i>, London versus NY).</li> <li>In that case the default settings may vary by market.</li> </ul>	
Incorporated Standards:	<ul> <li>This contract description incorporates by reference the following industry standard documentation and standards:</li> <li>(a) 2006 ISDA Definitions;</li> <li>(b) 2002 ISDA Equity Derivatives Definitions; and</li> <li>(c) Annex SS to 2004 Americas Interdealer Master Equity Derivatives Confirmation (except that references therein to the 2000 ISDA Definitions shall be deemed references to the 2006 ISDA Definitions).</li> <li>For convenience, certain terms are mapped to their FpML 5.5 equivalent.</li> </ul>	
Product Type/ISDA OTC Taxonomy:		
ISDA OTC Asset Class:	Equity	
ISDA OTC Base Product:	Swap	
ISDA OTC Sub-Product:	Price Return Basic Performance	
ISDA OTC Transaction type:	Basket	
Further Limitations:	None	
Terms:		
Type of Transaction:	Share Basket Swap Transaction	
Trade Date:	As agreed by the parties.	
Notional Amount ("notional"):	An amount in USD agreed by the parties.	
Effective Date ("effectiveDate"):	Per Annex SS, unless otherwise agreed by the parties.	
Effective Date Business Days:	As specified by the parties from among the Available Business Days.	
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.	

Termination Date ("terminationDate"):	Per Annex SS, unless otherwise specified by the parties.		
Basket:	As specified by the parties in compliance with the rules		
	and regulations of the CFTC and SEC applicable to		
	broad-based indices.		
Exchange(s):	As specified by the parties with respect to each Share		
	comprised in the Basket.		
Related Exchanges:	Per Annex SS, unless otherwise agreed by the parties.		
Hedging Party:	As specified by the parties.		
Determining Party:	As specified by the parties.		
Equity Amounts:			
Equity Amount Payer ("payerPartyReference"):	As specified by the parties.		
Equity Notional Amount:	As specified by the parties.		
Equity Notional Reset:	Per Annex SS.		
Type of Return:	Total Return		
Initial Price:	As specified by the parties and adjusted in accordance		
	with Annex SS.		
Final Price:	As per Annex SS unless otherwise agreed by the parties.		
Valuation Time:	As per Annex SS unless otherwise agreed by the parties.		
Valuation Date:	As specified by the parties.		
Floating Amount:			
Floating Rate Payer ("payerPartyReference"):	As specified by the parties.		
Notional Amount ("notionalAmount"):	As per Annex SS.		
Payment Dates:	As per Annex SS, unless otherwise agreed by the parties.		
Floating Rate Option ("floatingRateIndex"):	As per Annex SS, unless otherwise agreed by the parties.		
Designated Maturity ('indexTenor")	As specified by the parties.		
Spread:	As specified by the parties.		
Day Count Fraction:	Actual/360		
	As specified by the parties.		
Reset Date ("resetDate"):			
Payment Dates Business Days:	As specified by the parties.		
Business Days (Other Than Payment Dates):	As specified by the parties.		
Business Day Convention (Other Than Payment Dates):	As per Annex SS, unless otherwise specified by the parties.		
Settlement Terms:	parties.		
Cash Settlement:	Applicable		
Settlement Currency:	USD		
Dividends:			
Dividend Payment Date(s):	As per Annex SS unless otherwise agreed by the parties.		
Dividend Period:	As per Annex SS unless otherwise agreed by the parties.		
Dividend Amount:	As per Annex SS unless other wise agreed by the parties. As per Annex SS unless otherwise agreed by the parties.		
Relevant Dividend:	If type of return is "Total Return" as per Annex SS		
Relevant Dividend.	unless otherwise agreed by the parties.		
Reinvestment of Dividends:			
	Inapplicable		
Dividend Recovery:	As per Annex SS unless otherwise agreed by the parties.		
Adjustment Events:			
Method of Adjustment:	As per Annex SS unless otherwise agreed by the parties.		
Options Exchange:	As agreed by the parties if "Options Exchange		
	Adjustment" is applicable.		
Consequences of Merger Events:			
Share-for-Share:	As per Annex SS unless otherwise agreed by the parties.		
Share-for-Other:	As per Annex SS unless otherwise agreed by the parties.		
Share-for-Combined:	As per Annex SS unless otherwise agreed by the parties.		
Options Exchange:	As agreed by the parties if "Options Exchange		
	Adjustment" is applicable.		
Consequences of Tender Offers:			

Tender Offer:	As per Annex SS, unless otherwise agreed by the parties.	
Share-for-Share	As agreed by the parties if Tender Offer is applicable.	
Share-for-Other:	As agreed by the parties if Tender Offer is applicable.	
Share-for-Combined:	As agreed by the parties if Tender Offer is applicable.	
Options Exchange:	As agreed by the parties if "Options Exchange Adjustment" is applicable.	
Composition of Combined Consideration:	Per Annex SS unless otherwise agreed by the parties.	
Nationalization, Insolvency or Delisting:	Per Annex SS unless otherwise agreed by the parties.	
Additional Disruption Events:		
Change in Law:	As per Annex SS, unless otherwise agreed by the parties.	
Insolvency Filing:	As per Annex SS, unless otherwise agreed by the parties.	
Hedging Disruption:	As per Annex SS.	
Increased Cost of Hedging:	As per Annex SS unless otherwise agreed by the parties.	
Loss of Stock Borrow:	Inapplicable	
Increased Cost of Stock Borrow:	Inapplicable	
Non-Reliance:	As per Annex SS unless otherwise agreed by the parties.	
Agreements and Acknowledgements Regarding Hedging Activities:	As per Annex SS.	
Additional Acknowledgements:	As per Annex SS unless otherwise agreed by the parties.	
Index Disclaimer:	As per Annex SS unless otherwise agreed by the parties.	
Mutual Early Termination Right:	As agreed by the parties.	
Interest Breakage Cost:	If Mutual Early Termination Right is applicable, as specified by the parties.	
Calculation Agent:	As agreed by the parties.	

### Equity Index Available Business Day Conventions

	ISDA Name
Following	
Modified/Modified Following	
No Adjustment	
Preceding	
FRN Convention/Eurodollar Convention	

### Equity Index Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective	Latest Effective Date	Earliest Termination	Latest Termination
	Date		Date	Date
N/A	N/A	N/A	N/A	One Year from
				Effective Date

#### Equity Index Notional Amounts

Currency	Minimum	Increment	Maximum	Default
USD	10,000,000	1,000,000	N/A	N/A

### Equity Index Requirements and Defaults

Date	Requirement	Default
Designated Maturities for Linear		Tenors quoted next shorter and
Interpolation		longer than the actual Calculation
		Period length