



## Circular

26 September 2016

Circular No. **DC/AM - 81 of 2016**

# Launch of Titan DT/DC, SGX's new Derivatives trading and clearing platform

## Amendments to the Futures Trading Rules, SGX-DC Clearing Rules and contract specifications

SGX is pleased to inform you that Titan DT/DC will be launched on Monday, 31 October 2016.

Titan DT/DC replaces the current Derivatives trading and clearing platforms, QUEST and SGXClear, which will be decommissioned as of the Titan DT/DC launch date. A new Collateral Management System ("CMS") will also be launched at the same date.

## Titan DT/DC: New Features and Enhancements

Titan DT/DC brings many enhancements and new features to our members and participants including extended trading hours, and enhanced risk controls and system safeguards to help market participants manage their trading and clearing positions on a 24-hour basis:

Enhancements/Features	Details
Extended Trading Hours – up to 22 hours trading with reduced T/T+1 gap	<p>Changes in trading hours:</p> <ul style="list-style-type: none"> <li>T session – FX contracts will start trading earlier with Pre-Open at 6.45am. Mini Nikkei futures will align its trading hours with the regular Nikkei futures. There will be no change to the T session of all other contracts.</li> <li>T+1 session – T+1 for all contracts will start earlier with a reduced 15 minute gap (equity index/dividend) or 5 minute gap (all other contracts) from T close. T+1 close is extended to 4.45am for all contracts.</li> <li>Standardisation of Pre-Open/Pre-Close timings <ul style="list-style-type: none"> <li>T session Pre-Open of 13mins followed by Non-Cancel of 2mins</li> <li>T session Pre-Close of 4mins followed by Non-Cancel of 1min</li> <li>T+1 session Pre-Open of 8mins followed by Non-Cancel of 2mins.</li> </ul> </li> </ul>

Users will be able to login from 6.15am. Users are encouraged to use the new delta queries to ensure login time will be minimised. Titan DT/DC will support queries and broadcasts that will return the delta changes to the instrument data since the last login attempt. This alleviates high bandwidth requirements and reduces time taken to

Enhancements/Features	Details
	download the full instrument data during the trading sessions.
Changes to price limits in T+1 session and options strikes auto-generation due to reduced T/T+1 gap	<p>Changes to price limits in T+1 session:</p> <ul style="list-style-type: none"> <li>Price limits in T session will continue to apply in T+1 session until the new Daily Settlement Price (DSP) is published whereupon new price limits based on the new DSP will take effect. The impact on participants' orders/quotes is negligible as bids below the lower price limits and offers above the upper price limits will be allowed.</li> </ul> <p>Changes to options strikes auto-generation:</p> <ul style="list-style-type: none"> <li>Options strikes auto-generation will no longer reference DSP but will refer to the spot (equity index/FX) or last price (interest rate). Clearing members can continue to request the Exchange to list additional strikes when necessary.</li> </ul>
Risk Management Features	
<ul style="list-style-type: none"> <li>Pre-Trade Risk Controls (PTRC)</li> </ul>	<ul style="list-style-type: none"> <li>Titan PTRC will be integrated into the trading engine for greater stability and performance. Titan PTRC will offer enhanced functionalities including credit, position and price limits, order rate limits, a kill switch and mass cancel, in alignment with FIA recommendations. The new functionalities will offer significantly improved risk management capabilities to both clearing and trading members.</li> </ul>
<ul style="list-style-type: none"> <li>Self-Trade Prevention</li> </ul>	<ul style="list-style-type: none"> <li>The self-trade prevention functionality can be used by participants to avoid unintentional internal trade matching by preventing participant's orders from executing against each other and can be configured at the participant or API user level.</li> </ul>
<ul style="list-style-type: none"> <li>Mass Quote Protection</li> </ul>	<ul style="list-style-type: none"> <li>The mass quote protection functionality can be used to limit exposure across a market (e.g. CNX Nifty Index futures and options) by setting thresholds (minimum of 25 lots) which will apply immediately at the trading engine. This functionality allows market makers to manage their exposure risk more effectively and gives them more confidence to quote with greater quantity, better spread or both. This will in turn improve the trading conditions of other participants, improving the overall market for the product.</li> </ul>
Trade At Settlement (TAS)	<p>The new TAS capability allows members to trade a futures contract at a price equal to or at a certain differential ("delta") to the yet-to-be determined DSP for that contract. A TAS series and order book will be created in parallel to the regular series and order book, for each eligible contract. If a final settlement price ("FSP") is available on the same day, the FSP, instead of the DSP, will be used as the reference price for TAS trades. TAS series will be available during a contract's T+1 session. In that case, the reference price will be the DSP determined at the end of the following T session.</p> <p>The following contracts will be launched with TAS:</p> <ul style="list-style-type: none"> <li>SGX FTSE China A50 Index Futures (CN)</li> </ul>

Enhancements/Features	Details
	<ul style="list-style-type: none"> <li>• SGX MSCI China Index Futures (CH)</li> <li>• SGX MSCI Indonesia Index Futures (ID)</li> <li>• SGX MSCI Singapore Index Futures (SGP)</li> <li>• SGX MSCI Taiwan Index Futures (TW)</li> <li>• SGX Nikkei 225 Index Futures (NK)</li> <li>• SGX Nifty 50 Index Futures (IN)</li> <li>• SGX SICOM RSS3 Futures (RT)</li> <li>• SGX SICOM TSR20 Futures (TF)</li> </ul>
Long Dated Orders	Good-Till-Date orders will be introduced. Both Good-Till-Cancelled and Good-Till-Date orders will be supported for all products except for equity index futures calendar spreads.
ITCH & OUCH	Titan will introduce the ITCH and OUCH low-latency, binary socket protocols for market access. ITCH is a direct multicast data feed in market-by-order format for immediate market signals and instant order book updates. OUCH is a fixed-length binary transaction message that provides the fastest, asynchronous interaction with the order book for participants to send day limit orders.
Registration of off market derivatives	Titan OTC will be available for trade registration from 6:45 am SGT until 04:45 am SGT on SGX Clearing days.
Enhanced intraday variation margin collection	During the intraday and owl margin cycles, members will be able to cover settlement variation deficits with excess margin in any currency or with government bonds.
New Sovereign Limits for Government Securities Collateral	Sovereign concentration limits will be introduced on Government Securities ("GS") collateral. Refer to Circular No. DC/CCM – 18 of 2016 for more details.
General Enhancements	<ul style="list-style-type: none"> <li>• The leg pricing logic in Titan for strategy trades has been enhanced and will generally lead to leg prices more aligned with current market prices as the Titan formula uses prices available in the leg order book to calculate the leg prices.</li> <li>• Matching of strategy orders will be optimised. Price limits applicable to leg contracts will not apply to a strategy trade that is matched on the strategy order book.</li> <li>• The underlying issuer code will be changed from NSE to IISL for the Nifty suite</li> <li>• The screen tick size for SGX Nifty IT Index Futures (INI) and SGX Nifty CPSE Index Futures (ING) will not change but it will display 2 decimal places instead of no decimal places</li> <li>• To allow automation of trading within the error trade price range as requested by market participants, SGX will make available the static error trade price range via broadcast over API via BL2155. SGX recommends members query via ML2156 to retrieve the latest error trade price range for applicable products on connection at start of day.</li> <li>• Due to a lack of demand for many of the screen combinations, only the 2-legged calendar spreads will be</li> </ul>

Enhancements/Features	Details
	<p>available in Titan.</p> <ul style="list-style-type: none"> <li>• To align with global market practices and standards of anonymous markets, Titan will not include counterparty information in the trade confirmation broadcast (BD6). Accordingly, such information will no longer be applicable for the purposes of paragraph 3.2 of the Futures Trading Rules Regulatory Notice 2.6.4.</li> <li>• Tiered inter-commodity margin spreads will be introduced to allow for more granular risk netting effects between different contracts e.g. Nikkei Dividend versus Nikkei 225.</li> </ul>

The details of these enhancements and features can be found in the Titan Access Technical Documents and SGX Derivatives Product Catalogue found on SGX's website.

Please note that all orders including Good-Till-Cancel orders will expire at the end of T+1 session on 29 October 2016 and will not be brought over to Titan DT.

The Futures Trading Rules, SGX-DC Clearing Rules and various contract specifications will be amended to provide for the introduction of Titan DT/DC and the changes described above.

#### **Other amendments to Futures Trading Rules, SGX-DC Clearing Rules and contract specifications**

The Futures Trading Rules, SGX-DC Clearing Rules and various contract specifications will also be amended to provide for the following changes:

- The price limits for both the SGX Nifty 50 Index futures and the SGX MSCI India futures will be amended. Each contract will have two tiers of price limits – 10% and 15%. The cooling-off period will be 5 minutes.
- The negotiated large trade (NLT) tick size for INI and ING will be changed to 0.01 points
- To check the orders of those customers with sponsored access to the SGX trading engine, trading members may, instead of setting or controlling limits in those customers' systems, use Titan PTRC.
- SGX will notify members of the volatility range that it has set for a contract on a quarterly (instead of daily) basis.

Further, instead of setting out examples of how trading and clearing members may meet their obligation to conduct automated pre-execution risk control checks and have error prevention alerts, the rules will clarify SGX's expectations on a principle basis.

The operational information on submission of Reporting of Account Identity (Form BC4A) (Appendix 1 of Regulatory Notice 3.3.17, 3.3.18, 3.3.26, 3.3.27 of the Futures Trading Rules) will also be deleted. The operational information as required by Rule 3.3.17 of the Futures Trading Rules will be set out in the Form BC4A excel template (available for download from <https://esub.sgx.com>) instead.

The amended rules and contract specifications are attached for your attention at Appendix A, Appendix B and Appendix C. The amendments are marked in red.

The amendments to the rules and contract specifications will come into effect on **31 October 2016**.

Please contact your SGX Business Manager if you require further clarification.

Appendix A: Amendments to Futures Trading Rules

Appendix B: Amendments to SGX-DC Clearing Rules

Appendix C: Amendments to the following contract specifications

1. SGX FTSE China A50 Index Futures
2. SGX MSCI Indonesia Index Futures
3. SGX MSCI Malaysia Index Futures
4. SGX-PSE MSCI Philippines Index Futures
5. SGX MSCI Singapore Index Futures
6. SGX Straits Times Index Futures
7. SGX MSCI Thailand Index Futures
8. SGX MSCI Taiwan Index Futures
9. USD Nikkei Stock Average Futures
10. SGX Nikkei Stock Average Futures
11. SGX Mini Nikkei Stock Average Futures
12. SGX MSCI India Index Futures
13. SGX Nifty 50 Index Futures
14. SGX Nifty IT Index Futures
15. SGX Nifty CPSE Index Futures
16. SGX MSCI China Free Index Futures
17. SGX Nifty Bank Index Futures
18. SGX Nifty Midcap 50 Index Futures
19. SGX Three Month Euroyen Futures
20. SGX MSCI China Free Index Options
21. SGX Options on SGX MSCI Singapore Free (SiMSCI) Index Futures
22. SGX Options on MSCI Taiwan Index Futures
23. SGX Nifty 50 Index Options
24. SGX Options on Nikkei Stock Average Futures
25. SGX Options on INR/USD Futures
26. SGX Option on Three Month Euroyen Futures
27. SGX Options on Mini 10-Year Japanese Government Bond Futures

Alison King  
Senior Vice President  
Derivatives