



SIX Swiss Exchange message no. 47/2013

Subject	SWXess Maintenance Release 4 (SMR4)	
Category	SWXess Trading Platform	
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In <u>SIX Swiss Exchange message no. 31/2013</u>, SIX Swiss Exchange announced the introduction of the SWXess Maintenance Release 4 (SMR4) in November 2013 and gave an initial overview of the changes this upgrade will involve.

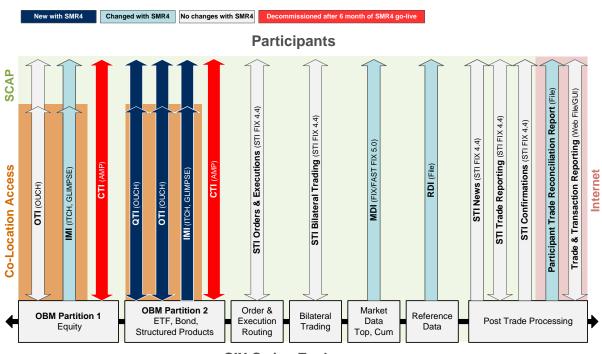
This message provides participants with detailed information on the changes to business transactions and new functionalities in SMR4.

Functional Changes

With SWXess Maintenance Release 4 (SMR4), SIX Swiss Exchange will mainly introduce «X-stream INET» direct low latency interfaces for trading, quoting and market data for Partition 2 «Non-Equity» (ETFs, Sponsored Funds, Bonds and Scoach Structured Products) of the On Book Matcher (OBM) via SCAP and Co-Location Service.

	SWXess Maintenance Release 4 (SMR4)
Functional Enhancements	 OTI available also for OBM - Partition 2 IMI available also for OBM - Partition 2 QTI new available only for OBM – Partition 2 Co-Location available also for OBM – Partition 2 IMI Snapshot Service (GLIMPSE) - Partitions 1 and 2 MDI Gap Recovery - Partitions 1 and 2 MDI change of Value Added Channel data distribution after End of Trading RDI new Instrument Partition Code Decommissioning of FIX-based reconciliation files
Affected Interfaces	 Direct Trading Interfaces (OTI, IMI & QTI) Capacity Trading Interface (CTI) – decommissioning within 6 month after go-live Market Data Interface (MDI) Reference Data Interface (RDI) Trade Reconciliation Report (TRR)

This section gives a graphical overview of the SWXess changes introduced with SMR4 and describes the interface changes in more detail.





OUCH Trading Interface (OTI)

 The «X-stream INET» direct low latency interface OUCH Trading Interface (OTI) for trading will be made available for Partition 2 of the OBM. Price Takers can therefore additionally use OTI for order entry, replace and deletion for trading in ETFs, Sponsored Funds, Bonds and Scoach Switzerland Structured Products.

Please note, that for Price Takers the orders per second capacity and latency (including roundtrip time) provided via OTI for Partition 2 of the OBM will be configured to behave in a similar way to the current Standard Trading Interface (STI). The OTI functionalities and latency currently provided for Partition 1 (Equities) of the OBM will be the same as today.

For trading on Partition 2 of the OBM via OTI, new separate OTI Users will need to be created. The OTI Users for Partition 1 cannot be shared for Partition 2. Participants may request new OTI Users for Partition 2 for Membertest by submitting the form <u>«Application SWXess User»</u> to Member Services.

- OTI for trading on Partition 2 of the OBM is available as of go-live of SMR4 and is optional; thus participants who are not interested in using this service offering are not affected by this change.
- A global per user emergency limit is implemented on both OBM Partitions. This is to protect the system from misbehaving applications submitting an abnormal high number of transactions per second. The emergency limit is the same for all OTI users. When an OTI user exceeds the emergency limit, its OTI user will be disconnected and the OTI user's orders will be deleted.
- OTI will replace the legacy Capacity Trading Interface (CTI) for proprietary trading. Participants
 may request OTI Users for proprietary trading on Partition 1 (Equities) of the OBM for
 Membertest by submitting the form <u>«Application SWXess User»</u> to Member Services.

Please note that in the Membertest environment, as opposed to Production, participants may maintain CTI and OTI users for proprietary trading in parallel. SIX Swiss Exchange will communicate the migration process from CTI to OTI for participants in the Production environment well in advance of the go-live date of SMR4 in Production.

 The migration from CTI to OTI is mandatory for all participants which perform proprietary trading on Partition 1 (Equities) of the OBM within 6 months from the go-live date of SMR4 in Production.

ITCH Market Data Interface (IMI)

• The «X-stream INET» direct low latency interface ITCH Market Data Interface (IMI) for market data will be made available for Partition 2 of the OBM (ETFs, Sponsored Funds, Bonds and Scoach Switzerland Structured Products). Thus, participants can receive market data via IMI for both OBM Partitions.

Please note that for receiving market data for Partition 2 of the OBM via IMI, new separate IMI Users will need to be created. The IMI Users for Partition 1 cannot be shared for Partition 2. Participants may request new IMI Users for Membertest by submitting the form <u>«Application SWXess User»</u> to Member Services.

- IMI for receiving market data from Partition 2 of the OBM is available as of go-live of SMR4 and is optional; thus participants who are not interested in using this service offering are not affected by this change.
- For «ITCH Market Data Interface» (IMI) a new optional snapshot service (GLIMPSE) for step in recovery is offered for both Partitions 1 and 2 of the OBM. The new GLIMPSE Service uses the SoupBinTCP protocol only and allows users to reconnect during the trading day in case of loss of connection and rebuild the current participants own order book state efficiently.

Please note that for using the new GLIMPSE service new separate GLIMPSE Users for each OBM Partition will need to be created. Participants may request new GLIMPSE Users for Partition 1 and 2 for Membertest by submitting the form <u>«Application SWXess User»</u> to Member Services

The snapshot service GLIMPSE is available as of go-live of SMR4 and is optional; thus participants who are not interested in using this service offering are not affected by this change.

Quote Trading Interface (QTI)

 A new OUCH protocol based «Quote Trading Interface» (QTI) will be introduced for market making on Partition 2 (ETFs, Sponsored Funds, Bonds and Scoach Switzerland Structured Products) of the OBM. It supports the quote management functionality allowing market makers to enter, replace and cancel quotes as well as receive status changes and executions (trades) for their quotes.

QTI will replace the legacy Capacity Trading Interface (CTI) for market making. Participants may request QTI Users for market making on Partition 2 of the OBM for Membertest by submitting the form <u>«Application SWXess User»</u> to Member Services.

• Please note that in the Membertest environment, as opposed to Production, participants may have CTI and QTI users for market making in the same products in parallel. SIX Swiss Exchange will communicate the migration process for the switch from CTI to QTI for participants in the Production environment well in advance of the go-live date of SMR4 in Production.

• The migration from CTI to QTI is mandatory for all participants which perform market making on Partition 2 of the OBM within 6 months from the go-live date of SMR4 in Production.

Capacity Trading Interface (CTI)

• The OUCH protocol based industry standard OUCH Trading Interface (OTI) and Quote Trading Interface (QTI) will replace the legacy «Capacity Trading Interface» (CTI) for proprietary trading and market making. CTI will therefore be decommissioned for both OBM Partitions within 6 month after the go-live date of SMR4.

OBM Partition	Products	Decomissioning	New Interface
Partition 1	Equities	CTI for Proprietary Trading	OUCH Trading Interface (OTI)
	ETFs / ETSFs / ETPs Sponsored Funds Bonds Scoach Structured Products	-	OUCH Trading Interface (OTI) - new
Partition 2		CTI for Market Making	Quote Trading Interface (QTI)

- During the transition period, CTI applications will continue to be supported and remain unaffected with the introduction of the SWXess Maintenance Release 4 (SMR4).
- The CTI decommissioning affects all participants which use Capacity Trading Interface (CTI) for proprietary trading or market making and is mandatory within 6 months from the go-live date of SMR4 in Production.

Market Data Interface (MDI)

- An improved gap recovery service will be introduced in the Market Data Interface (MDI). The new
 recovery mechanism will use a protocol that is analogous to the OBM MoldUDP64 re-requester
 service and allows lost multicast packets and/or messages to be recovered faster and more
 efficiently.
 - This change will be available in MDI as of go-live of SMR4 and is optional; thus
 participants who are not interested in using this improved recovery mechanism are not
 affected by this change.
- A behavioral change to the Value Added Channel (VAC) in Market Data Interface (MDI) will be introduced with SMR4. After end of Trading, the statistical trade and price data per traded security is no longer distributed for all instruments, but only for securities which traded (on or off order book) on the current business day and for all securities which are tradable on order book at SIX Swiss Exchange (lit book).
 - This change will be implemented in MDI as of go-live of SMR4 and is mandatory for all participants.

Reference Data Interface (RDI)

- An additional attribute is introduced to identify on which On Book Matcher (OBM) Partition a security is traded. The RDI file "TradedInstrument.txt" is extended with an additional attribute "instrumentPartitionCode".
 - This change will be implemented in RDI as of go-live of SMR4 and is mandatory for all participants.

Trade Reconciliation Report (TRR)

- The FIX-based Trade Reconciliation File (currently available on the Member Section) will be decommissioned. It has been replaced with a newer, improved human-readable Participant Trade Reconciliation Report (TRR), which was already introduced with SMR3.
 - The decommissioning of the FIX-based Trade Reconciliation File affects all participants which are currently using this service and the migration to the new TRR is required within 9 weeks from the go-live date of SMR4 in Production.
- The Participant Trade Reconciliation Report has been further enhanced and made available at regular time intervals during the trading day. The Counterparty information (contraFirmPartyID) field is now populated not only for off order book trades but also for on order book trades without counterparty anonymity.
 - The behavioral change of the Trade Reconciliation Report (TRR) will be available as of go-live of SMR4 and might affect participants already using the reconciliation reports.

Co-Location

• The Co-Location service is extended to Partition 2 of the OBM. With SMR4 all participants are able to be co-located and can benefit from a faster roundtrip time. Participants with market making obligations or latency sensitive business are kindly requested to investigate whether for latency reasons it makes more sense to subscribe access to Co-Location.

Participants interested in using the Co-Location service are kindly requested to submit the form «<u>Co-Location Access</u>» to Technical Product Support.

Migration

SIX Swiss Exchange will provide support for participants for a smooth migration from Capacity Trading Interface (CTI) to OUCH Trading Interface (OTI) for proprietary trading and to Quote Trading Interface (QTI) for market making in the Production environment. Additionally, SIX Swiss Exchange aims to facilitate the configuration of the new IMI and OTI users for Partition 2 as well as the new GLIMPSE service for all participants in the Production environment.

Further details about the migration process for the Production environment including the required forms will be published in sufficient time before the introduction of SMR4 by means of a SIX Swiss Exchange message.

Technical Changes

Some functional changes which will be introduced with SWXess Maintenance Release 4 (SMR4) are mandatory for all participants as of the go-live of the release and require adjustments to participants' systems and interfaces. All participants using Capacity Trading Interface (CTI) for proprietary trading or market making must migrate to the OTI or QTI within six months after the SMR4 go-live date, i.e. in May 2014, when CTI is decommissioned.

Please find the SMR4 related interface specifications as well as further information about the functional and technical changes in MSC Message 42/2013. The corresponding Release Notes are available in the <u>Member Section</u> of SIX Swiss Exchange.

Document	Link
MSC messages	https://www.six-swiss-exchange.com/member_section/it/messages.html
Specifications and Manuals	https://www.six-swiss-exchange.com/member_section/it/manuals_en.html

Testing

Before SMR4 is rolled out into Production, participants will have a window of approximately nine weeks to test their applications and processes in the Membertest environment. We strongly recommend participants to perform functional tests for the mandatory changes which will be introduced with SMR4. You are kindly invited to contact SIX Swiss Exchange if you require assistance with testing in the Membertest environment.

Regulatory Changes

The functional changes of SMR4 also result in regulatory changes. The following directives and guides are potentially affected in this respect:

- SIX Swiss Exchange and Scoach Switzerland Directives
 - o Directive 2: Technical Connectivity
 - Directive 7: Fees and Costs
- Trading Guides

Updates to the directives and guides will be communicated one month before the productive implementation of SMR4 by means of a SIX Swiss Exchange message. In addition, they will be published on the internet site of SIX Swiss Exchange and Scoach Switzerland.

Implementation Plan

Please find below the details for the rollout of SWXess Maintenance Release 4 (SMR4):

Date	Environment
2 September 2013	First Trading Day with SMR4 in Membertest
4 November 2013	First Trading Day with SMR4 in Production

Please note that SIX Swiss Exchange has set 25 November 2013 as a contingency date for the productive implementation of SMR4.

More information on the SWXess Maintenance Release 4 (SMR4) is available in the <u>Member Section</u> of SIX Swiss Exchange.

SIX Swiss Exchange is happy to be able to add value to its participants with the implementation of SMR4 and the associated innovations and improvements.

If you have any questions, please do not hesitate to contact Member Services:

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