

# SWXess Maintenance Release

**SMR15 Release Guide (Version 1.00)** 

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## 1 Introduction

## 1.1 Purpose and Scope

This document provides all relevant information for SMR15 including functional and technical changes, regulatory impact, relevant documents and artefacts, configuration changes, migration plan and testing activities.

## 1.2 Structure of this Document

This document contains information relevant to both business and technical audiences. The target audience of major sections is indicated with pictograms and text. The major sections are given below.

	Audience	Major Sections
<u>o</u> <u>û</u>	Business and Technical Audience	2 Summary
		3 Key Dates
		4 Functional Changes
		7 Overview of Documents and Artefacts
		8 Migration
盒	Business Audience	6 Regulatory Impact
o <sup>©</sup>	Technical Audience	5 Technical Changes
v ·		9 Testing Activities During Member Test Phase

## 1.3 Revision History

Version	Description
1.00	Initial version

## 1.4 References

Document Reference	Subject
SIX Swiss Exchange messages	https://www.six-group.com/en/products-services/the-swiss-stock-exchange/market-data/news-tools/swiss-exchange-messages.html
Trading Rules	https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html
Trading Guides	https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html#trading-guides
Forms	https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/participation.html#application-forms
SMR Releases	https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading.html#swxess-maintenance-releases
MSC Messages	https://secure.six-swiss-exchange.com/member_section/it/messages.html
Interface Specifications, Manuals and Guides	https://secure.six-swiss-exchange.com/member_section/it/manuals.html
Release Documents	https://secure.six-swiss-exchange.com/member_section/it/release_docs.html

## 1.5 Contact

## **Market Operations**

If you have business related questions, please do not hesitate to contact Market Operations.

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Local Support Center Zurich	+41 58 399 2400	<u>lsz@six-group.com</u>



Find further contact information in the <u>SIX Swiss Exchange Contact Center</u> of the SIX Swiss Exchange website.

## 2 Summary



**Business and Technical Audience** 

### 2.1 Introduction

SIX Swiss Exchange will introduce a new maintenance release of the SWXess trading platform. SWXess Maintenance Release 15 (SMR15) will contain required interface changes for SWXess participants.

SMR15 will be introduced in the Membertest environment in a staged approach. Membertest stage 1 is scheduled for 3 March 2025 and Membertest stage 2 is scheduled for 31 March 2025.

SMR15 is scheduled to go live in the **Production Environment** on 12 May 2025 with contingency date 30 June 2025.

The key functionality of SMR15 will be released into the Membertest environment in stages as follows:

Change	Stage 1	Stage 2*	Section
Enhancements to the SwissAtMid Block Trading Service			4.1
Enhancement to Retail Order Types Stop Loss and Stop Limit			4.5
QOD CHF-Bonds – QTI support for one-sided quotes			4.4
QOD CHF-Bonds Bonds - "Must-have" Liquidity Provider for QOD Requests			4.5
Separation of Snapshot and Delta Channels via MDDX			4.7
Connectivity to ARTEX Global Markets			4.8
Enhancements to QOD Requests with Sweep		Ø	4.9
Connectivity Upgrade between SIX Swiss Exchange and its Clearing Houses	N/A	N/A	4.10
Other Technical Changes			5.6

<sup>\*</sup> Additional functionality may be added and announced in due course



Functional Changes

For further information on the stages and the functionalities of SMR15, please refer to section 3.

## 2.2 SMR15 Matrix Changes vs Interfaces and Services

The table below shows the changes introduced with SMR15 and the impact on interfaces and services.

血	= business change	Click on the section number to see the business description.
o <sup>‡</sup>	= technical change	Click on the section number to see the technical description
	= no change	

						SWXe	ess Inte	rfaces	and Sei	vices					
Changes	Business Changes only	ОТІ	QΤΙ	IMI	STI	SIX MDDX	RDI	SIX Trading User Interface	Sponsored Access FIX Drop Copy	TRI - Transaction Reporting Interface	TXR - Transaction Reconciliation Report	TRR – Participant Trade Reconciliation Report	ORR – Participant Order Reconciliation Report	Billing Report Interface	SCAP
Enhancements to the SwissAtMid Block Trading Service	4.1														
Enhancement to Retail Order Types Stop Loss and Stop Limit	4.5														
QOD CHF-Bonds Bonds – QTI support for one- sided quotes			4.4 5.2												
QOD CHF-Bonds Bonds - "Must-have" Liquidity Provider for QOD Requests		4.6 • 5.3.1			4.6 •** 5.3.2										
Separation of Snapshot and Delta Channels via MDDX						4.7 5.4.1	4.7 5.4.5								
Connectivity to ARTEX Global Markets					4.8 5.5.1		4.8 5.5.2								

		SWXess Interfaces and Services													
Changes	Business Changes only	ОТІ	ФП	IMI	STI	SIX MDDX	RDI	SIX Trading User Interface	Sponsored Access FIX Drop Copy	TRI - Transaction Reporting Interface	TXR - Transaction Reconciliation Report	TRR – Participant Trade Reconciliation Report	ORR - Participant Order Reconciliation Report	Billing Report Interface	SCAP
Enhancements to QOD Requests with Sweep	4.9														
Other Technical Changes							° <sup>‡</sup> 5.6.1			5.7.1		5.6.2			

# 3 Key Dates



## **Business and Technical Audience**

The following table shows the key dates of SMR15 as scheduled at this stage:

Date	Test	Prod	Activity
12 November 2024	<b>7</b>	$\square$	Initial Announcement of SMR15 and publication of SMR15 Release Guide and affected SWXess interface specifications
27 January 2025	Ø	$\square$	Publication of updated SMR15 Release Guide and affected SWXess interface specifications
24 February 2025	Ø		Confirmation of Start Membertest with publication of updated SMR15 Release Guide and affected SWXess interface specifications
28 February- 1 March 2025	Ø		SMR15 Membertest Migration weekend stage 1
2 March 2025	<b></b>		Contingency Day - SMR15 Membertest Migration stage 1
3 March 2025	<b></b>		SMR15 Membertest stage 1 live date and first trading day includes:
			<ul> <li>Enhancements to the SwissAtMid Block Trading Service</li> <li>Enhancement to Retail Order Types Stop Loss and Stop Limit</li> <li>QOD CHF-Bonds - QTI support for one-sided quotes</li> <li>QOD CHF-Bonds - "Must-have" Liquidity Provider for QOD Requests</li> <li>Separation of Snapshot and Delta Channels via MDDX</li> <li>Connectivity to ARTEX Global Markets</li> <li>Connectivity Upgrade between SIX Swiss Exchange and Clearing Houses</li> </ul>
5 March 2025	<b>7</b>		Intraday Recovery Test - MDDX Infrastructure down
12 March 2025			Intraday Recovery Test - On Book Matcher Partition 1 down
19 March 2025	<b>7</b>		Intraday Recovery Test - On Book Matcher Partition 2 down
22 March 2025	<b>7</b>		Performance Load Test
24 March 2025	Ø		Publication of updated SMR15 Release Guide and affected SWXess interface specifications (if applicable)
28-29 March 2025	$\square$		SMR15 Membertest Migration weekend stage 2
30 March 2025	$\square$		Contingency Day - SMR15 Membertest Migration stage 2
31 March 2025	Ø		SMR15 Membertest stage 2 live date and first trading day includes:  - Enhancements to QOD Requests with Sweep  - Additional functionality may be added and announced in due course
5 April 2025	<b>7</b>		Performance Load Test
7 April 2025		$\square$	Publication of updated Directives and Guidelines for SMR15 Production Publication of updated SMR15 Release Guide
9 April 2025	<b></b>		Intraday Recovery Test - Both On Book Matcher Partitions down
16 April 2025	Ø		Intraday Recovery Test - STI FIX Infrastructure down (Single FIX Gateway Failure and Double FIX Gateway Failure)
23 April 2025	<b></b>		Intraday Recovery Test - MDDX Infrastructure down
30 April 2025	<b></b>		Intraday Recovery Test - Contingency

Date	Test	Prod	Activity
10-11 May 2025		$\overline{\checkmark}$	SMR15 Production Migration weekend
12 May 2025		$\overline{\checkmark}$	SMR15 Production live date and first trading day
28-29 June 2025		$\overline{\checkmark}$	Contingency: SMR15 Production Migration weekend
30 June 2025		$\overline{\square}$	Contingency: SMR15 Production live date and first trading day

## 4 Functional Changes



**Business and Technical Audience** 

## 4.1 Enhancements to the SwissAtMid Block Trading Service

## 4.2 Changes to SwissAtMid Block Scoring

With SMR10, SIX Swiss Exchange introduced a Block Order type for the SwissAtMid trading service, which can be entered as indicative or binding. Participants entering indicative Block Orders are dynamically scored based on their responses to Firm-up Requests and the quality of their responses forms their Reputational Order Score. This score is used to calculate:

- Participant Order Score (last 100 Reputational Order Scores over all ISINs)
- Participant Order Score per ISIN (last 50 Reputational Order Scores for the specific ISIN)

Participants whose Participant Order Score falls below the Participant Order Score Threshold, defined by SIX Swiss Exchange, may be blocked from submitting further indicative or firmed-up Block Orders.

Participants whose ISIN Score falls below the Participant Order Score per ISIN Threshold, defined by SIX Swiss Exchange, will automatically be blocked from submitting further indicative or firmed-up Block Orders. Details can be found in section 4.1.6 of the <u>SMR10 Release Guide</u>

The Reputational Order Score is calculated as follows:

#### Quality of Response x Quality of Size x Quality of Price x Match Break

New with SMR15, "Quality of Price" is removed from the calculation method. This change is due to difficulties participants had in adjusting order prices to the Midpoint price during the Firm-up phase. This change aims to give participants an increased possibility of improving their scores.

Additionally, with SMR15, all fills from a participant's orders on the same side and ISIN during the Firm-up Phase will count towards "Quality of Size," not just those in response to the specific Firm-up Request which created the Firm-up phase from the specific Firm-up Request. This broader scope should help participants improve their scores.

Overall therefore, the new method for calculating the Reputational Order Score for SMR15 will be as follows:

#### Quality of Response x Quality of Total Firmed Up Size x Match Break

The details of the changes in the calculation of the Reputational Order Score are shown below:

	Current: SMR14	New: SMR15
Quality of Response	Is set to 100 when the participant responds within the allowed Firm up interval, otherwise it is set to 0	No change
Quality of Size	Is based on the ratio between the original Indicative Block Order size and the Order Firm-up Size when the indicative Block Order has been Firmed-up. The Order Firm Up Size is made up of:  - Confirmed size when the Indicative Block Order has been Firmed-Up, during the Indicative Block Order's Firm-up Phase	Is based on the ratio between the original indicative Block Order size and the Total Firmed-up size.  The Total Firmed-up size will be made up of:  Order Firm-up Size  Confirmed size when the indicative Block Order has been Firmed-up, during the indicative Block Order's Firm-up Phase
		The Total Firmed-up size will be made up of:  - Order Firm-up Size:

	Current: SMR14	New: SMR15
		Confirmed size when the indicative Block Order has been Firmed-up, during the indicative Block Order's Firm-up Phase
		- <b>Binding</b> Block Order Size
		Any binding Block Order quantity entered during the indicative Block Order's Firm-up Phase that is in the same security and on the same side of the order book as the indicative Block Order being Firmed-up.
		Normal order quantity routed solely to the mid- point order book (routing instruction SWM) and executed against a Block Order during the Indicative Block Order's Firm-up Phase in the same security and on the same side of the Order Book as the indicative Block Order being Firmed- up.
		Additional information:
		All fills (Firmed-up Block Orders, any binding Block Orders submitted to SWML, any normal order execution (including sub-LIS) submitted to SWM) of the same member and the same side for the same ISIN, during the Firm-up Phase, will be counted as part of the firmed-up value when calculating the quality of size.
Quality of Price	Is calculated depending on the movement of the order price during the Firm-up Phase.	No longer considered.
	If the midpoint price moves during the Firm-up Phase, the Participant must adjust the order price to equal or better the Midpoint price, otherwise they receive a score of zero.	
	If the Midpoint price does not move, but the participant alters the order price so that the order is no longer in limit then the participant receives a score of zero.	
Match Break	Users who amend their indicative Block Orders during the Firm-up Phase to reduce the Price Quality, Size Quality or results in a match break will receive a poor Order Score.	No change
	If the owner of an indicative order did not cause the Match Break with his behavior (e.g. normal SwissAtMid liquidity which was part of the Firm-up context is matched from outside the Firm-up context) that has no impact on the scoring.	



#### **Important Note**

Please note that as a result of this change, the Overall Participant Performance Scores and Participant per ISIN Scores will be reset to 100 for all participants.

This change will be effective in the Membertest environment from the Membertest stage 1 migration and in the Production environment from the Production go-live.

## 4.3 Reduction of the Firm-up Phase Random Matching Time

With SMR15, the SwissAtMid Block Order trading service will enhance its Random Matching Time during Firm-up Phase intervals, reducing it to 10 milliseconds.

Please find an overview of the Firm-up Phase interval times below with the changes highlighted in bold:

Attribute	Current: SMR14	New: SMR15
Manual Indicative Block Orders	30 seconds plus a maximum of 50 milliseconds "Random Matching Time"	30 seconds plus a maximum of <b>10 milliseconds</b> "Random Matching Time"
Automated Indicative Block Orders	450 milliseconds plus a maximum of 50 milliseconds "Random Matching Time"	450 milliseconds plus a maximum of <b>10</b> milliseconds "Random Matching Time"
Mix of Manual and Automatic Indicative Block Orders	30 seconds plus a maximum of 50 milliseconds "Random Matching Time"  And 450 milliseconds plus a maximum of 50 milliseconds "Random Matching Time"	30 seconds plus a maximum of <b>10 milliseconds</b> "Random Matching Time"  And 450 milliseconds plus a maximum of <b>10</b> milliseconds "Random Matching Time"

Please note that the change of the Random Matching Time will be effective in the Membertest environment from the Membertest stage 1 migration and in the Production environment from the Production go-live.



#### **Further Reading**

SMR10 Release Guide

## 4.4 QOD CHF-Bonds – QTI Support for One-sided Quotes

With SMR13, SIX Swiss Exchange allowed the side (buy or sell) of the QOD Request to be disclosed to QOD Liquidity Providers (LPs). Whether the side information is disclosed or not is determined by SIX Swiss Exchange at the trading segment level. Currently single-sided quotes are accepted via the OUCH Trading Interface (OTI) but rejected via the Quote Trading Interface (QTI). This means that over QTI, QOD LPs must submit two-sided quotes in response to QOD requests, even when they already know the side of the QOD Request.

With SMR15, SIX Swiss Exchange will allow QOD LPs to respond to all QOD Requests with a single-sided quote via QTI. Both single- and double-sided quotes will be accepted, if they match the quantity specified in the QOD Request.

This change benefits the QOD CHF Bonds service, where the side of the QOD Request is always disclosed to the QOD LP. The trading segments that currently have side disclosure configured are:

Trading Segment ID	Trading Segment Name	qodSideDisclosureFlag
589	Bonds – CHF Swiss Confederation	Yes
585	Bonds – CHF	Yes
588	Bonds – CHF Swiss Pfandbriefe	Yes

Participants can view this information in the TradingSegment.txt file in the Reference Data Interface (RDI). The details regarding which trading segments are configured with which type of disclosure can also be found in the "Trading Parameters" Guideline.



This change will be available for testing in Membertest stage 1 on 3 March 2025 and will go live in the Production environment on 12 May 2025



#### **Further Reading**

"Trading Parameters" Guideline

## 4.5 Enhancement to Retail Order Types Stop Loss and Stop Limit

With SMR11, SIX Swiss Exchange introduced the Stop Loss and Stop Limit retail order types, which allow participants to specify a Trigger Price so that their orders will not enter the order book until the Trigger Price has been met. For further details about the supported Order Books and Trigger behaviors of Stop Loss / Limit orders please see section 4.1.8 of the SMR 11 Release Guide.

Currently, Stop Loss / Limit Orders supported in the Quote Driven Market (QDM) are triggered in the following way:

- Buy side orders are triggered if the Reference price (usually but not always the last paid price) or Best Sell Quote Price is equal to or higher than the specified Stop Price.
- Sell side orders are triggered if the Reference Price (usually but not always the last paid price) or the Best Bid Quote is equal to or lower than the Stop Price.

With SMR15, SIX Swiss Exchange will introduce a validation for triggering Stop Loss/Limit orders in the QDM. This validation checks quotes against a new maximum spread value, the "quote spread percentage", set at the traded instrument level. Existing rules for triggering by reference price or best quote remain, but now only quotes within the maximum spread and at the best price can trigger these orders.

The quote spread percentage is the difference between the highest bid quote and the lowest offer quote that rests in the order book, as a percentage of the offer quote price. For example, if a security's best bid price is CHF 9.95 and the best offer price is CHF 10. The bid-ask spread is CHF 0.05. The spread as a percentage is (0.05 / 10) \*100 = 5%. This spread will then be validated using the new maximum spread value.

SIX Swiss Exchange will determine maximum spread values individually for all securities in the following trading segments:

Trading Segment ID	Trading Segment Name	Reference to Trading Parameters Guideline
584	Exchange Traded Funds (ETF)	Annex J – Exchange Traded Funds (ETF)
585	ETF on bonds of the Swiss Confederation	Annex J – Exchange Traded Funds (ETF)
588	Exchange Traded Products (ETP)	Annex Q – Exchange Traded Products (ETP)
612	Sponsored Funds	Annex K – Sponsored Funds



#### **Important Note**

Please note the validation against a maximum quote spread will not be applied to the triggering of Stop Loss / Limit orders in the Quote Driven Market (QDM) with the Price Validation Model (applicable currently only to the Structured Products trading segment).



This change will be available for testing in Membertest stage 1 on 3 March 2025 and will go live in the Production environment on 12 May 2025.



#### **Further Reading**

- SMR11 Release Guide

## 4.6 QOD CHF-Bonds - "Must-have" Liquidity Provider for QOD Requests

In the QOD CHF-Bonds service, a QOD Call Phase is triggered for each submitted QOD Request during continuous trading. At the start of the QOD Call Phase, all registered QOD LPs (the default) or an individual list of registered QOD LPs (if selected by the QOD Requester), will be invited to submit quotes with the quantity defined by QOD Request.

New with SMR15, it will be possible for participants submitting a QOD Request to have one "must-have" QOD LP configured (more than one is not possible). Trades in the QOD will only be possible if the "must-have" QOD LP has responded to the QOD Request, by either submitting a quote or rejecting the quote request.

If participants wish to configure a "must-have" LP, they must send the PartyID of the required QOD LP via the <u>PartyID</u> and <u>SenderCompID Configuration Form</u> to Member Services <u>member.services@sixgroup.com</u>).

Participants can identify the registered Liquidity Providers for all Quote on Demand trading services via the existing attribute in the Reference Data Interface (RDI) below:

Object	Attributes	Туре
Party	qodEtfLiquidityProviderFlag qodBondLiquidityProviderFlag qodEuropeLiquidityProviderFlag	Boolean

Once a participant has submitted a "must-have" QOD LP to Member Services, the QOD Requester must invite the "must-have" LP with every QOD Request. This can be done either by inviting all registered LPs or a list of registered QOD LPs (including the "must-have" LP). If a "must-have" LP is configured for the participant but is not contained in the list, then the QOD Request will be rejected. For more information on the selection of an individual list of registered QOD LPs, please see section 3.1.5.1 of the <a href="SMR9.1 Participant Readiness Guide">SMR9.1 Participant Readiness Guide</a>.

The table below outlines the possible outcomes when a "must-have" LP is configured for a participant:

Trading Mode	Quote response from "must- have" LP	Rejection from "must-have" LP	No response from "must-have" LP
Auto-Execute or Cancel	Auto-execution can occur if the other conditions for matching are met*	Auto-execution can occur if the other conditions for matching are met*	Auction is terminated at the end of the auction without execution
Auto-Execute and Optional Discretion	Auto-execution can occur if the other conditions for matching are met*	Auto-execution can occur if the other conditions for matching are met*	Auction moves to the optional Discretionary Phase During the Optional Discretion phase, auto-execution occurs if the

Trading Mode	Quote response from "must- have" LP	Rejection from "must-have" LP	No response from "must-have" LP
			"must-have" LP responds and the other conditions for matching are met*, otherwise the auction is terminated.  If auto-execution conditions are not met, discretionary execution is only possible if "must-have" LP did respond
Discretion only	Execution occurs if the QOD Requester chooses to trade	Execution occurs if the QOD Requester chooses to trade with other LPs	Auction is terminated at the end of the Discretionary only phase without execution

<sup>\*</sup>For the full conditions that are required for matching in each trading mode, please see 3.1.8 of the <u>SMR9 Participant Readiness</u> Guide.

Please find below an overview of the changes to the OUCH Trading Interface (OTI):

- New rejection reason in the existing "Rejected Order Message" [J]
- New Auction Status value in "QOD Replaced Message" [u]

Please find below an overview of the changes to the Standard Trading Interface (STI):

- New enumerator in OrdStatus (FIX Tag 39) in the existing Execution Report (MsgType=8) message
- New text value in Text (FIX Tag 58) in the existing Execution Report (MsgType=8) message



This change will be available for testing in Membertest stage 1 on 3 March 2025 and will go live in the Production environment on 12 May 2025



#### **Further Reading**

- OUCH Trading Interface (OTI) Specification (Version 1.24.0)
- Standard Trading Interface (STI) Specification Orders and Executions (Version 2.80.0)
- SMR9 Participant Readiness Guide
- SMR9.1 Participant Readiness Guide



Please go to section 5.3 for a detailed technical description.

## 4.7 Separation of Snapshot and Delta Channels via MDDX

SIX Swiss Exchange currently delivers market data via the MDDX Multi-Dimensional Data FluX<sup>TM</sup> Interface, over a number of MoldUDP64 channels containing both Snapshot and Delta messages. With SMR15, SIX Swiss Exchange will split these channels into separate Snapshot-only and Delta-only channels. This separation will allow participants to

benefit from lower latency and bandwidth requirements and also to decrease the complexity of their MDDX feed receivers.

The following changes will be made to the existing Market Data channels:

MDDX Channel Name	MDDX Channel Description	MDDX Channel Type with SMR14	MDDX Channel Type with SMR15
CUM-BC	[CUM] Swiss Blue Chips		2 - Cumulated delta channel
CUM-SME	[CUM] Mid and Small Cap Equities & Funds		
CUM-BO-CHF	[CUM] Bonds - CHF	1 - Cumulated Channel (delta and	
CUM-BO-NCHF	[CUM] Bonds - Non CHF	snapshot)	
CUM-EBBO	[CUM] EBBO		
CUM-ETx	[CUM] ETFs, ETSFs, ETPs & Sponsored Segments		
TOP-BC	[TOP] Swiss Blue Chips		
TOP-SME	[TOP] Mid and Small Cap Equities & Funds		
TOP-BO-CHF	[TOP] Bonds - CHF		
TOP-BO-NCHF	[TOP] Bonds - Non CHF	8 - Top of book channel (delta and snapshot)	9 - Top of book delta channel
TOP-EBBO	[TOP] EBBO	знарэнос)	
TOP-ETx	[TOP] ETFs, ETSFs, ETPs & Sponsored Segments		
TOP-SSP	[TOP] Structured Products		

In addition, the following new Snapshot-only channels will be introduced:

MDDX Channel Name	MDDX Channel Description with SMR15	MDDX Channel Type with SMR15	
CUMSN-BO-CHF	[CUMSN] Bonds - CHF		
CUMSN-BO-NCHF	[CUMSN] Bonds - Non CHF		
CUMSN-EBBO	[CUMSN] EBBO	3 - Cumulated snapshot channel	
CUMSN-ETx	[CUMSN] ETFs, ETSFs, ETPs & Sponsored Segments		
TOPSN-BO-CHF	[TOPSN] Bonds - CHF		
TOPSN-BO-NCHF	[TOPSN] Bonds - Non CHF		
TOPSN-EBBO	[TOPSN] EBBO	10 - Top of book snapshot channel	
TOPSN-ETx	[TOPSN] ETFs, ETSFs, ETPs & Sponsored Segments	- 10 - 10p of book shapshot channel	
TOPSN-SSP	[TOPSN] Structured Products		

The new channels and corresponding modifications will be reflected in the existing Reference Data Interface (RDI) files:

- MDDXChannel.txt
- TradedInstrumentMDDXChannel.txt

## į

#### **Important Note**

The previous configurations will not be supported.

There is no change to participants receiving snapshot messages at the start of a session for all pre-trade data on the delta-only channels: DOB-SME and DOC-BC.



This change will be available for testing in Membertest stage 1 on 3 March 2025 and will go live in the Production environment on 12 May 2025



Please go to section 5.4 for a detailed technical description.

## 口

#### **Further Reading**

- Reference Data Interface (RDI) Specification (Version 2.47.0)

## 4.8 Connectivity to ARTEX Global Markets

SIX has partnered with the world's first regulated Multilateral Trading Facility (MTF) for trading fine art shares, ARTEX Global Markets ("ARTEX Global Markets"). ARTEX Global Markets aims at democratizing investment opportunities in the premium segment of the fine art market.

By using fractionalization and providing liquidity, ARTEX Global Markets allows a broader range of investors to benefit from art's proven store of value and portfolio diversification advantages. ARTEX Global Markets enables investment in iconic masterpieces via equity products. The MTF secures liquidity through market makers and transparency thanks to real-time data dissemination.

New with SMR15, SIX Swiss Exchange will provide connectivity to ARTEX Global Markets, via SIX Swiss Exchange Participants' existing SCAP connectivity. Participants will be able to use their SCAP connectivity for order entry and maintenance directly to the MTF via the Standard Trading Interface (STI).



This change will be available for testing in Membertest stage 1 on 3 March 2025 and will go live in the Production environment on 12 May 2025

## 4.8.1 Participation

All existing trading participants of SIX Swiss Exchange who are interested in trading on ARTEX should contact ARTEX Global Markets directly for information on membership: <a href="https://www.artexgm.com/contact">https://www.artexgm.com/contact</a>

Further information related to trading on ARTEX Global Markets, including information on Trading Schedules, Rules and Regulations, Fees etc. can be found here: <a href="https://www.artexgm.com/trading-information">https://www.artexgm.com/trading-information</a>

## 4.8.2 Technical Connectivity

ARTEX Global Markets order entry and maintenance is only supported via the Standard Trading Interface (STI) and SCAP connectivity.

Once membership with ARTEX Global Markets is established, participants can leverage their existing STI connectivity with SIX Swiss Exchange to trade on ARTEX Global Markets. To enable order entry and maintenance towards ARTEX Global Markets, participants must change the configuration of their Party ID(s) via the <a href="maintenance">PartyID and SenderCompID</a> Configuration Form which should be submitted to Member Services (<a href="maintenance">member.services@sixgroup.com</a>).

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#### **Further Reading**

- Standard Trading Interface (STI) Specification Orders and Executions (Version 2.80.0)
- Standard Trading Interface (STI) Specification Session Layer (Version 2.10.0)



Please go to section 5.5.1 for a detailed technical description.

#### 4.8.3 Securities

Participants can identify the securities eligible for trading on ARTEX Global Markets via a new "ARTEXTradedInstrument.txt" file which will be accessible via the existing Reference Data Interface (RDI).

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#### **Further Reading**

Reference Data Interface (RDI) Specification (Version 2.47.0)



Please go to section 5.5.2 for a detailed technical description.

#### 4.8.4 Market Data

ARTEX MTF market data is only available via the point-to-point SoupBinTCP SIX MDDX Multi-Dimensional Data  $FluX^{TM}$  Interface (MDDX) or alternatively via the services of third party data vendors.



#### **Further Reading**

SIX MDDX Interface Specification (Version 1.52.0)

## 4.8.5 Post-Trade Processing

Art shares executed on ARTEX Global Markets are cleared through a central clearing counterparty (CCP) and settled through an International Central Depositary System (ICSD). CCP services are provided by SIX x-clear while ICSD services are provided by Euroclear and Clearstream.



#### **Important Note**

Participants wishing to trade on ARTEX Global Markets may need to update their existing clearing information in advance of the start of trading.

Participants are requested to contact the responsible Relationship Manager or Solutions & Onboarding (+41 58 399 4551) / <u>solutions.onboarding@six-securities-services.com</u>) for information on their current model.

## 4.9 Enhancements to QOD Requests with Sweep

In the existing trading service "Quote on Demand" (QOD), participants can enter two different types of QOD Request:

- QOD Request Non Sweep (Routing instruction/order placement QODN) which executes only in the QOD order book
- QOD Request with Sweep (Routing instruction/order placement QODS) which can execute in the QOD order book and/or the Quote Driven Market (QDM) order book

Currently, a QOD Request with Sweep will only be considered for matching if there is at least one QOD Response from a Market Maker/Liquidity provider in the QOD order book, which is equal to or better than the QOD Sweep Request's price limit. If this criteria is not met the QOD Request will not be able to match in the QOD. It will also not be possible for it to sweep to the QDM. New with SMR15, this restriction will no longer apply. If there is no QOD response in the QOD order book that lies within the requester's price limit, the QOD Request with Sweep will be able to sweep to the QDM. The Sweep into the QDM will only be applied if the full size of the QOD Request with Sweep can be immediately and fully executed in the QDM, whilst respecting the set price limit.

The table below shows the changes to the execution conditions for QOD Requests with Sweep (QODS):

QODS Execution Conditions SMR14	QODS Execution Conditions SMR15
The minimum number of LP's have provided a response. This condition applies only for Auto-Execution phases of QOD (present only for "Auto-Execute Only" and "Auto-Execute and Optional Discretion" trading modes).	No change
It must be possible to match the full QOD Request order quantity with the limit price.	No change
There must be at least one QOD Response in the QOD Order book which is equal to or better than the QOD Sweep Request's price limit for a QOD Sweep Request to execute a sweep.	A QOD Response within the price limit is no longer required.
If the best price is in QDM, then the QOD order matches against QDM orders until QOD order quantity exhausted or best price of QOD responses is reached.	A QOD Request can sweep to the QDM and match there fully even if there is no QOD Response within the price limit in the QOD book.
If QOD order quantity is not exhausted and QDM orders have the same price as best response in QOD, then the QOD order matches against orders in QDM until time priority is worse	

QODS Execution Conditions	QODS Execution Conditions
SMR14	SMR15
than best response in QOD book or QOD order quantity is exhausted.	
If QOD order quantity is not exhausted, then match against best order in QOD book.	



#### **Important Note**

Please note that QOD Request Sweep orders are not supported in either the QOD CHF-Bonds service or in ETF/ETP QOD Europe and so there is no impact from this change.



This change will be available for testing in Membertest stage 1 on 3 March 2025 and will go live in the Production environment on 12 May 2025.

## 4.10 Connectivity Upgrade between SIX Swiss Exchange and its Clearing Houses

As part of the continuous goal to improve our technology, SIX Swiss Exchange will upgrade the connectivity to its Clearing Houses (x-Clear, CBOE Clear and LCH).

This change will be transparent to our participants at the trading level. If you have any questions, please contact your Clearing House directly for further information.



#### **Important Note**

This change will be available for testing in Membertest stage 1 on 3 March 2025.

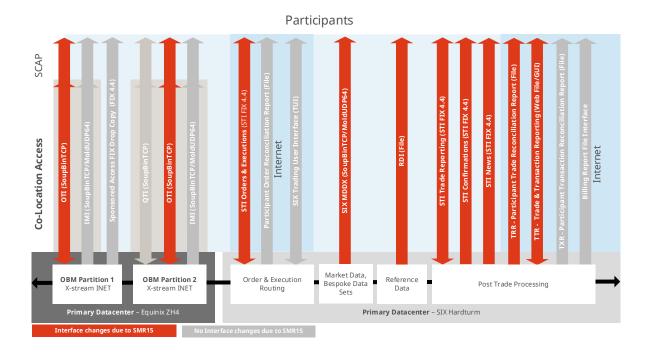
However, it will go live in the Production environment in September 2025, independently of the SMR15 release timeline.

## **5** Technical Changes



**Technical Audience** 

## **5.1** Overview SMR15 Interface Changes



## 5.2 QOD CHF-Bonds – QTI support for one-sided quotes

Please see section 4.4 for a detailed business description.

There are no technical changes, only descriptive changes in the specification.

## 5.3 QOD CHF-Bonds - "Must-have" Liquidity Providers for QOD Requests

Please see section 4.6 for a detailed business description.

## **5.3.1 OUCH Trading Interface (OTI)**

The following table shows the impacted messages and fields:

Message Type	Field	Impact
Rejected Order Message [J]	Reason	Changed - New Reason Code 'M' and Explanation
QOD Replaced Message [u]	Auction Status	Changed - New enumerator and updated Notes in relation to QOD for Swiss Franc Bonds



### **Further Reading**

OUCH Trading Interface (OTI) Specification (Version 1.24.0)

## **5.3.2** Standard Trading Interface (STI)

The following table shows the impacted message and fields:

Message Type	FIX Tag	Impact
New Order Single (MsgType=D)	TargetPartyID (1462)	Updated Descriptions for Invited Target Party Block and FIX-Tag, in relation to QOD for Swiss Franc Bonds
Execution Report (MsgType=8)	OrdStatus (39)	Changed – new enumerator:  'M' = Discretionary execution of QOD auction not possible, because mandatory LP did not respond yet
	Text (58)	New possible error text string (not defined in Spec)

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#### **Further Reading**

- Standard Trading Interface (STI) Specification - Orders and Executions (Version 2.80.0)

## 5.4 Separation of Snapshot and Delta Channels via MDDX

Please see section 4.7 for a detailed business description.

#### **5.4.1 SIX MDDX**

With the current implementation, having both the Delta and Snapshot messages within the same channel requires the use of higher bandwidth, a higher throttling rate, higher latency, delays and higher complexity. Participants have to discard snapshot messages if they are not used and this causes extra load on the resources.

With SMR15, SIX Swiss Exchange will split the MoldUDP64 channels into separate Snapshot-only and Delta-only channels. This separation provides a standardization of Pre-Trade Channel Types (Delta only vs Snapshot only) and will allow participants to benefit from lower latency and bandwidth requirements and also to decrease the complexity of their MDDX feed receivers.

The following sections describe how this will be achieved.

#### **5.4.2** New Multicast Channels

**New** multicast channels (and multicast addresses) will be introduced for the **new** Snapshot-only channels. Ports remain the same.

Please make sure that these new IP Addresses are not blocked on your side. The changes will be reflected in the Reference Data Files as described in section 5.4.5 and the proposed multicast addresses are also provided below for reference:

#### 5.4.2.1 Production Environment

MDDX Channel Name	multicastAddressA	Port	multicastAddressB	Port
CUMSN-BO-CHF	239.49.69. <b>53</b>	7300	239.49.5. <b>53</b>	7300
CUMSN-BO-NCHF	239.49.69. <b>54</b>	7300	239.49.5. <b>54</b>	7300
CUMSN-EBBO	239.49.69. <b>55</b>	7300	239.49.5. <b>55</b>	7300
CUMSN-ETx	239.49.69. <b>56</b>	7300	239.49.5. <b>56</b>	7300

MDDX Channel Name	multicastAddressA	Port	multicastAddressB	Port
TOPSN-BO-CHF	239.49.69. <b>33</b>	7300	239.49.5. <b>33</b>	7300
TOPSN-BO-NCHF	239.49.69. <b>34</b>	7300	239.49.5. <b>34</b>	7300
TOPSN-EBBO	239.49.69. <b>35</b>	7300	239.49.5. <b>35</b>	7300
TOPSN-ETx	239.49.69. <b>36</b>	7300	239.49.5. <b>36</b>	7300
TOPSN-SSP	239.49.69. <b>37</b>	7300	239.49.5 <b>.37</b>	7300

## **5.4.2.2** Membertest Environment

MDDX Channel Name	multicastAddressA	Port	multicastAddressB	Port
CUMSN-BO-CHF	239.51.69. <b>53</b>	7300	239.51.5. <b>53</b>	7300
CUMSN-BO-NCHF	239.51.69. <b>54</b>	7300	239.51.5. <b>54</b>	7300
CUMSN-EBBO	239.51.69. <b>55</b>	7300	239.51.5. <b>55</b>	7300
CUMSN-ETx	239.51.69. <b>56</b>	7300	239.51.5. <b>56</b>	7300
TOPSN-BO-CHF	239.51.69. <b>33</b>	7300	239.51.5. <b>33</b>	7300
TOPSN-BO-NCHF	239.51.69. <b>34</b>	7300	239.51.5. <b>34</b>	7300
TOPSN-EBBO	239.51.69. <b>35</b>	7300	239.51.5. <b>35</b>	7300
TOPSN-ETx	239.51.69. <b>36</b>	7300	239.51.5. <b>36</b>	7300
TOPSN-SSP	239.51.69. <b>37</b>	7300	239.51.5. <b>37</b>	7300

## **5.4.3** Amended Multicast Channels

#### **5.4.3.1 Production Environment**

Existing multicast TOP and CUM channels remain unchanged for all multicast addresses and ports **but they will disseminate only deltas.** 

MDDX Channel Name	multicastAddressA	Port	multicastAddressB	Port
CUM-SME	239.49.69.41	7300	239.49.5.41	7300
CUM-BC	239.49.69.42	7300	239.49.5.42	7300
CUM-ETx	239.49.69.43	7300	239.49.5.43	7300
CUM-BO-CHE	239.49.69.44	7300	239.49.5.44	7300
CUM-BO-NCHF	239.49.69.45	7300	239.49.5.45	7300
CUM-EBBO	239.49.69.46	7300	239.49.5.46	7300
TOP-SME	239.49.69.21	7300	239.49.5.21	7300
TOP-BC	239.49.69.22	7300	239.49.5.22	7300
TOP-ETx	239.49.69.23	7300	239.49.5.23	7300
TOP-BO-CHE	239.49.69.24	7300	239.49.5.24	7300
TOP-BO-NCHF	239.49.69.25	7300	239.49.5.25	7300
TOP-SSP	239.49.69.26	7300	239.49.5.26	7300
TOP-EBBO	239.49.69.27	7300	239.49.5.27	7300

#### 5.4.3.2 Membertest Environment

Existing multicast TOP and CUM channels remain unchanged for all multicast addresses and ports **but they will disseminate only deltas.** 

MDDX Channel Name	multicastAddressA	Port	multicastAddressB	Port
CUM-SME	239.51.69.41	7300	239.51.5.41	7300
CUM-BC	239.51.69.42	7300	239.51.5.42	7300
CUM-ETx	239.51.69.43	7300	239.51.5.43	7300
CUM-BO-CHE	239.51.69.44	7300	239.51.5.44	7300
CUM-BO-NCHF	239.51.69.45	7300	239.51.5.45	7300
CUM-EBBO	239.51.69.46	7300	239.51.5.46	7300
TOP-SME	239.51.69.21	7300	239.51.5.21	7300
TOP-BC	239.51.69.22	7300	239.51.5.22	7300
TOP-ETx	239.51.69.23	7300	239.51.5.23	7300
TOP-BO-CHE	239.51.69.24	7300	239.51.5.24	7300
TOP-BO-NCHF	239.51.69.25	7300	239.51.5.25	7300
TOP-SSP	239.51.69.26	7300	239.51.5.26	7300
TOP-EBBO	239.51.69.27	7300	239.51.5.27	7300



#### **Important Note**

Be aware that you will still receive snapshots once at the start of the session. For example this already occurs today on DOB-SME and DOB-BC (delta only channels, where segregation is already implemented for DOB channels) pre-SMR15.

#### **5.4.4 Untouched Multicast Channels**

All other remaining multicast channels remain unchanged for all multicast address and ports in Production and Membertest Environments (i.e. NEWS, VA ,TRADES, DOB-BC, DOB-SME, DOBSN-BC, DOBSN-SME, DOB-EBBO and DOBSN-EBBO).

## 5.4.5 Reference Data Interface (RDI)

In addition to the changes already mentioned in the detailed business section 4.7, the new channels and channel configurations will be reflected in the existing Reference Data Interface (RDI) files:

- MDDXChannel.txt
- TradedInstrumentMDDXChannel.txt

## 5.5 Connectivity to ARTEX Global Markets

Please see section 4.8 for a detailed business description.

Please find below some additional details regarding ARTEX Global Markets.

MIC	ARTX
LEI	254900UL01RE2SEBFH84

## **5.5.1** Standard Trading Interface (STI)

The following table shows the impacted message and fields:

Message Type	FIX tag	Impact
New Order Single (MsgType=D)		
Execution Report (MsgType=8)	D (1) I (2) (2) (2)	Changed – New value 'ARTX' (for ARTEX Orders)
Order Cancel Request (MsgType=F)	RoutingInstruction (9487)	
Order Cancel Replace Request (MsgType=G)		
Execution Report (MsgType=8)	BookSubType (26562)	Changed – New possible value 'ARTX'
Execution Report (MsgType=8) ('End of Snapshot' Execution Report)	SecurityID (48)	Changed – New possible value 'ARTX' (for ARTEX orders snapshot)

The descriptions of some FIX tags have also been amended in the Standard Trading Interface (STI) Specification - Orders and Executions, for cases where it is not applicable for ARTEX.

Updates have also been made to the Standard Trading Interface (STI) Session Layer Specification to include references to ARTEX.



#### **Further Reading**

- Standard Trading Interface (STI) Specification Orders and Executions (Version 2.80.0)
- Standard Trading Interface (STI) Specification Session Layer (Version 2.10.0)

## 5.5.2 Reference Data Interface (RDI)

The following summary table highlights all impacted RDI files and fields:

Object	Field	Impact
ARTEXTradedInstrument.txt ( <b>NEW</b> )	isin	New field
	securityExchange	New field
	tradingCurrency	New field
	valorSymbol	New field
	descriptionShort	New field
	instrumentType	New field
	issuerCountryCode	New field



#### **Important Note**

Please note that the ARTEXTradedInstrument.txt file will only be available via SCAP and not from the Member Section.



#### **Further Reading**

- Reference Data Interface (RDI) Specification (Version 2.47.0)

## 5.6 Other Technical Changes

### 5.6.1 Specification / Implementation Changes in Reference Data Interface (RDI)

The following table highlights all impacted objects and attributes:

Object	Field	Impact
CashFlowEvent.txt	couponAmount	Removed field

From a functional perspective, it is believed that the attribute "couponAmount" is not needed for standard bonds and is incorrect for FRNs (Floating Rate Notes - Bonds with variable coupons) hence it will be **discontinued**.

Object	Field	Impact
TradingSegment.txt	hasPooledCapacityFlag	Updated description of field

Updated description to include information about the use of the flag for Auto Capacity and Global Capacity Pools.



#### **Further Reading**

- Reference Data Interface (RDI) Specification (Version 2.47.0)

## 5.6.2 Participant Trade Reconciliation Report Specification

Update of data type and description in Specification document.

File	Data Field	Impact
<pre><participantid>_TRADES_<date>_<sequencenumber>.txt</sequencenumber></date></participantid></pre>	auxClearingType	Updated data type and description for field



#### **Further Reading**

- Participant Trade Reconciliation Report Specification (Version 1.54.0)

## 5.7.1 Transaction Reporting Interface (TRI – CH) Validation Concept and Error Codes

A new Public Enumerator, Code and Error Description will be introduced specifically for TRI-CH Style Transaction Reports to indicate that the VenueCode is mandatory in cases where a TrdMatchID is defined.

Public Enumerator	Code	Error Description
VenueCodeIsMandatoryIfTrdMatchIDIsDefined	345	VenueCode Is Mandatory If TrdMatchID Is Defined

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#### **Further Reading**

- Transaction Reporting Interface (TRI - CH) Validation Concept and Error Codes (Version1.5.0)

## 6 Regulatory Impact



#### **Business Audience**

The functional changes introduced with SMR15 may necessitate changes to the trading and reporting rules and regulations. The following Rules, Directives and Guidelines may be affected and if so will be amended accordingly:

- Rules of SIX Swiss Exchange AG
- <u>Directives</u> of SIX Swiss Exchange AG
- <u>Guidelines</u> of SIX Swiss Exchange AG

Updates to the Directives and Guidelines for SMR15 will be communicated by SIX Swiss Exchange Message at the latest one month before the SMR15 goes live in the Production environment.

## 7 Overview of Documents and Artefacts



#### **Business and Technical Audience**

Please find below the list of all documents and artefacts relevant to SMR15.



All items can be downloaded from the Member Section Manuals or Downloads pages at:

https://secure.six-swiss-exchange.com/member\_section/it/manuals.html

https://secure.six-swiss-exchange.com/member\_section/it/downloads.html

Status	Date	Subject	Reference
General			
New for SMR15	12.11.2024	SMR15 Release Guide (Version 1.00)	This document
Unchanged	28.05.2024	SWXess Business Recovery Guide (Version 8.20)	SWX-RECV-MAN-GUID-820
Unchanged		IT Related Frequently Asked Questions (FAQ) and Known Issues	See <u>Member Section</u>
SIX Trading U	ser Interface (TUI)		
Unchanged	11.09.2023	SIX Trading User Interface - User Manual (Version 2.00)	SIX-TRD-UI-MAN-200
Direct Trading	JInterfaces (OTI, Q	TI, IMI)	
Updated for SMR15	30.10.2024	OUCH Trading Interface (OTI) Specification (Version 1.24.0)	SSX-OTI-TRD-SPEC-1.24.0
Updated for SMR15	30.10.2024	Quote Trading Interface (QTI) Specification (Version 1.16.0)	SSX-QTI-TRD-SPEC-1.16.0
Unchanged	22.05.2024	ITCH Market Data Interface (IMI) Specification (Version 1.22.0)	SSX-IMI-TRD-SPEC-1.22.0
Standard Trad	ling Interface (STI)		
Updated for SMR15	05.11.2024	Standard Trading Interface (STI) Specification - Orders and Executions (Version 2.80.0)	SWX-SPEC-STI-PRE-2.80.0
Unchanged	15.01.2024	Standard Trading Interface (STI) Specification - Confirmations (Version 2.34.0)	SWX-SPEC-STI-CONF-2.34.0
Updated for SMR15	31.10.2024	Standard Trading Interface (STI) Specification - Session Layer (Version 2.10.0)	SWX-SPEC-STI-SES-2.10.0
Unchanged	15.05.2023	Standard Trading Interface (STI) Specification - News (Version 2.11.0)	SWX-SPEC-STI-NEWS-2.11.0
Unchanged	26.05.2023	Standard Trading Interface (STI) Specification - Trade Reporting (Version 4.26.0)	SWX-SPEC-STI-TCRI-4.26.0
Updated for SMR15	Will be published later	Standard Trading Interface (STI) FIX 4.4 Repository (Version 15.0.0)	see Member Section <u>Downloads page</u>
Reference Dat	ta Interface (RDI)		
Updated for SMR15	31.10.2024	Reference Data Interface (RDI) Specification (Version 2.47.0)	SWX-VCA-SPEC-RDI-2.47.0

Status	Date	Subject	Reference
SIX MDDX			
Updated for SMR15	05.11.2024	SIX MDDX Interface Specification (Version 1.52.0)	SSX-MDDX-SPEC-1.52.0
Trade and Tra	nsaction Reporti	ng (TTR)	
Unchanged	10.06.2024	Transaction Reporting Interface Specification (TRI - CH Style) (Version 4.22.0)	SER-TRX-INT-CH-4.22.0
Updated for SMR15	18.10.2024	Transaction Reporting Interface (TRI - CH) Validation Concept and Error Codes (Version1.5.0)	SER-TRX-EER-CH-150
Unchanged	21.07.2023	Transaction Reporting Interface Specification (TRI - EU Style) (Version 1.15.0)	SER-TRX-INT-EU-1.15.0
Transaction R	econciliation Rep	ort (TXR)	
Unchanged	15.01.2024	Participant Transaction Reconciliation Report Specification (Version 1.9.0)	SSX-SWXS-SPEC-TXR-1.9.0
Trade Reconci	liation Report (TF	RR)	
Updated for SMR15	21.10.2024	Participant Trade Reconciliation Report Specification (Version 1.54.0)	SSX-SWXS-SPEC-TRR-1.54.0
Order Reconci	liation Report (O	RR)	
Unchanged	12.01.2024	Participant Order Reconciliation Report Specification (Version 1.32.0)	SSX-SWXS-SPEC-ORR-1.32.0
Billing Report			
Unchanged	08.01.2024	Billing Report File (BRI) Interface Specification (Version 1.37.0)	SWX-SPC-BRI-1.37.0
Sponsored Acc	ess Service		
Unchanged	09.05.2023	Sponsored Access FIX Drop Copy Interface Specification (Version 1.42.0)	SSX-SA-FDC-SPEC-1.42.0
Unchanged	16.04.2020	Sponsored Access File Interface (SFI) Specification (Version 1.7.0)	SSX-SA-SFI-SPEC-1.7.0
Buyback Program			
Unchanged	27.04.2020	BPS Reporting Application Interface Specification (Version 1.8.0)	see Member Section <u>BPS</u> <u>Downloads page</u>

## 8 Migration



**Business and Technical Audience** 

### 8.1 Migration Concept

The central SWXess infrastructure and all associated interfaces will be upgraded to SMR15 using a staged approach for the Membertest environment. The upgrade of the Production environment will take place over a single migration weekend. The SMR15 changes will become active on the Monday after the migration weekend.

The upgrade to SMR15 requires the migration of transactional data as well as participant and instrument reference data. In addition, the migration to SMR15 requires configuration changes. SIX Swiss Exchange will ensure that the technical and business upgrade and the migration impact on participants, ISVs, ASPs as well as data vendors is as minimal as possible.

The business and technical migration concepts and approaches are currently being evaluated. SIX Swiss Exchange will publish further details about the migration to SMR15 in an update of this Release Guide in advance of the start of Membertest stage 1.



#### **Required Action**

Participants, ISVs and ASPs will need to upgrade their trading applications and other infrastructure on the Membertest stage 1 and 2 and during Production Migration weekends.

## 8.2 Business Migration

To be published in a future version of the Release Guide.

## 8.3 SWXess Migration Weekends

#### 8.3.1 Main Activities

The main activities during the migration weekends will be:

#### SIX Swiss Exchange:

Upgrade of trading platform to SMR15

#### Participants, Data Vendors, ISVs and ASPs

- Update Member Own Applications (MOAs (if required))
- Verify connectivity and log in after upgrade (strongly recommended)

During the platform migration weekends, SIX Swiss Exchange will inform participants about the current status via System Status in the Member Section.

#### 8.3.2 Membertest Migration Schedule

To be published in a future version of the Release Guide.

#### 8.3.3 Production Migration Schedule

To be published in a future version of the Release Guide.

## 8.3.4 Connectivity Testing Checklist During Migration

On the migration weekend, after the SWXess trading platform upgrade has been completed, the SWXess interfaces will be available for testing according to the schedule in section 8.3.2 and 8.3.3 as shown in the following table:

Interface	Available via	Status	Recommended Testing Activities
SCAP	-	Fully available: SCAP network and VPN tunnel connectivity reestablished	Test network is up Test VPN tunnel status is up (e.g. ping 146.109.99.254
Co-Location Access (P01 only)	-	Fully available: Network connectivity established	Test Co-Location Access network status is up
STI	SCAP	Available without business functionality:  Session management test can be performed  Application messages are rejected (closed for input)  No morning snapshots are sent and therefore no open orders can be seen. Morning Snapshot will only be available on Monday morning	Test network connectivity of your SenderCompIDs (IP/Port) Test login
RDI	SCAP	Fully available: Reference data can be downloaded. The date of the file is 20250303 (Stage 1) / 20250331 (Stage 2)	Download RDI Files Process RDI files
IMI	SCAP and Co- Location Access (P01 only)	Available without market updates: User Logins enabled Heartbeat messages are sent UDP re-requester available Reference Data available	Test network connectivity Test login Test set-up and reception of messages
OTI	SCAP and Co- Location Access (P01 only)	Available without business functionality: User login enabled Application messages are rejected Error "R" (the order is not allowed at this time)	Test network connectivity Test login
QΤΙ	SCAP and Co- Location Access (P01 only)	Available without business functionality: User logins enabled Application messages are rejected Error "R" (quote not allowed at this time)	Test network connectivity Test login
SIX MDDX	SCAP	Available without market updates: User logins enabled Heartbeat messages are sent	Test network connectivity Test login

## 9 Testing Activities During Member Test Phase

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**Technical Audience** 

## 9.1 Scope of Member Test Phase

SIX Swiss Exchange strongly recommends that all Participants, Independent Software Vendors (ISVs), Application Service Providers (ASPs) and data vendors perform the following actions during the Member Test phase:

- Test Member Own Applications (MOAs) and verify that they are in-line with the latest SMR15 interface specifications, including full loop test with clearing and settlement as well as transaction reporting upload and download according to the new specifications. Please make sure that you test your business processes and back office workflows.
- Participate in the scheduled tests organized by SIX Swiss Exchange:
  - SWXess Intraday Recovery Tests
  - Performance Load Tests
  - Background Load Tests

Please contact Member Services (<u>member.services@six-group.com</u> / +41 58 399 2473) if you require assistance with testing in the Membertest environment.

## 9.2 Clearing and Settlement During Member Test Phase

The SIX SIS link for Clearing and Settlement is available during the Member Test phase except during Performance Load Tests and Background Load Tests. We recommend running full loop tests as soon as possible with your MOAs and back office systems.

## 9.3 Trading Hours and Availability

The trading hours and the availability of the Membertest environment remain unchanged for the SMR15 Member Test phase. Please refer to the following links for details:

Environment calendar	https://www.six-group.com/en/products-services/the-swiss-stock-exchange/market-data/news-tools/environment-calendar.html
Trading hours	https://www.six-group.com/dam/download/the-swiss-stock-exchange/trading/trading-provisions/trading-hours/trading-hours-membertest.pdf

#### 9.4 Load Tests

#### 9.4.1 Performance Load Tests

During the SMR15 Member Test phase, SIX Swiss Exchange will hold Performance Load Tests in the Membertest environment on the dates given in the table below.

Date	Time (CEST)	Load Generated	
22.03.2025	10:00 to 15:00	The detailed load pattern will be published in a separate MSC Message before each test.	Add to calendar
05.04.2025	10:00 to 15:00	The detailed load pattern will be published in a separate MSC Message before each test.	Add to calendar

You are invited to participate in the tests to verify your applications under high load. You are allowed to generate limited transaction load. No registration is required. You are kindly requested to leave your market data clients running and connected during the Performance Load Test, even if you do not participate in the test.

## 9.4.2 Background Load Tests

SIX Swiss Exchange will hold Background Load Tests each Tuesday and Thursday evening from 18:00 to 20:00 CEST using the following load distribution:

Time (CEST)	QPS Load	OTPS Load	FTPS Load
18:00 to 20:00	5000	500	250

You are invited to participate and allowed to generate own transaction load up to your test capacity.

The SIX SIS link for Clearing and Settlement is not available during Performance Load Tests and Background Load Tests.

## 9.5 SWXess Intraday Recovery Tests

#### 9.5.1 Activities

We have scheduled recovery tests on the dates given in the table below. During these tests, you have the possibility to verify the behavior of your applications during a recovery.

Date	Time (CET)	Activity	
05.03.2025	14:00-17:00	Intraday Recovery Test - MDDX Infrastructure down	Add to calendar
12.03.2025	14:00-17:00	Intraday Recovery Test – On Book Matcher partition 1 down	Add to calendar
19.03.2025	14:00-17:00	Intraday Recovery Test - On Book Matcher partition 2 down	Add to calendar
09.04.2025	14:00-17:00	Intraday Recovery Test - Both On Book Matcher Partitions down	Add to calendar
16.04.2025	09:30-12:00 14:00-17:00	Intraday Recovery Test - STI FIX Infrastructure down: Single Fix Gateway Failure and Double FIX Gateway Failure	Add to calendar
23.04.2025	14:00-17:00	Intraday Recovery Test - MDDX Infrastructure down	Add to calendar
30.04.2025	14:00-17:00	Intraday Recovery Test - Contingency date	Add to calendar



## Hint

You can download all calendar entries mentioned above here (zip file):

https://www.six-group.com/dam/download/market-data/news/environment-calendar/ical/six-swiss-exchange-smr15-activities.zip

## **Further Reading**

For full details on the testing activities, please refer to the document "SWXess Business Recovery Guide for Participants" (version 8.20) in the Member Section.

https://secure.six-swiss-exchange.com/member\_section/it/manuals.html

## 9.5.2 Information During Intraday Recovery Tests

For system status during the upgrade, please visit the **Membertest status page** in the Member Section.

https://secure.six-swiss-exchange.com/member\_section/system\_status\_test.html

If you wish to receive MSC Alerts by SMS or email regarding the recovery, please subscribe to priority "3- Low" alerts on the "My Subscriptions" page in the Member Section at:

https://secure.six-swiss-exchange.com/member\_section/user\_subs\_admin.html

# Appendix A Known Issues

Open known issues will be published and tracked in the <u>SIX Member Section</u> as they arise.



## **Further Reading**

IT Related Frequently Asked Questions (FAQ) and Known Issues

# **Appendix B** Terms and Abbreviations

Term/Abbreviation	Explanation
APP	Active Product Package for Leverage Products
ARTEX	ARTEX Global Markets AG. Trading Venue for Art Shares.
ASP	Application Service Provider
BME	Bolsas y Mercados Españoles
BPS	Buyback, Price Stabilization, Sales during Buyback Program
BRI	Billing Report File Interface
CLOB	Central Limit Order Book
CO:RE	Repo Trading Solutions (CO:RE Trading Platform)
CSD	Central Security Depository
EBBO	European Best Bid and Offer
ESMA	European Securities and Markets Authority
ETF	Exchange Traded Funds
ETP	Exchange Traded Products
FDC	Sponsored Access – FIX Drop Copy Interface
FIX	Financial Information eXchange Protocol
FMIA	Financial Markets Infrastructure Act
FMIO	Financial Markets Infrastructure Ordinance
FoK	Order with validity Fill or Kill
FTPS	FIX Transactions (orders) per Second (STI)
IMI	ITCH Market Data Interface
ISV	Independent Software Vendor
IoC	Order with validity Immediate or Cancel
ISP	Independent Service Provider
MEQ	Minimum Execution Quantity
MIC	Market Identifier Code
MiFID	Markets in Financial Instrument Directive
MiFIR	Markets in Financial Instruments Regulation
MMT	Market Model Typology
MOA	Member Own Application
MPOB	Mid-Point Order Book (SwissAtMid)
MTF	Multilateral Trading Facility as defined by FMIA
OBM	On Book Matcher
OHS	Organized Trading Facility as defined by FMIA
ORR	Order Reconciliation Report

Term/Abbreviation	Explanation
OTI	OUCH Trading Interface
OTPS	OUCH Transactions (orders) per Second (OTI)
PBBO	Primary Best Bid and Offer of the displayed Central Limit Order Book of the primary exchange
QDM	Quote Driven Market
QOD	Quote on Demand trading service
QPS	Quotes per Second (QTI)
QTI	Quote Trading Interface
RDI	Reference Data Interface
RSP	Routing Service Provider
RTS	Regulatory Technical Standard
SA	Sponsored Access
SCAP	SIX Common Access Portal
SEB	Swiss EBBO
SFI	Sponsored Access File Interface
SIX MDDX	SIX MDDX Multi-Dimensional Data fluX™ interface
SMP	Self-Match Prevention
SMR	SWXess Maintenance Release
STI	Standard Trading Interface
Swiss EBBO	Swiss EBBO trading service
SwissAtMid	SIX Swiss Exchange at Midpoint trading service
SWXess	Name of the SIX Swiss Exchange trading platform
TAL	Trading-At-Last
TRI	Transaction Reporting Interface
TRR	Trade Reconciliation Report
TTR	Trade and Transaction Reporting
TXR	Transaction Reconciliation Report
UI	User Interface
XOFF	Market Identifier Code for Off Exchange Transactions – Listed Instruments
ХОМН	Market Identifier Code for SIX Swiss Exchange AG – Structured Products
XQOD	Market Identifier Code for SIX Swiss Exchange AG – Quote on Demand
XSEB	Market Identifier Code for SIX Swiss Exchange AG – Swiss EBBO
X-stream INET	Name of NASDAQ OMX platform
XSWM	Market Identifier Code for SIX Swiss Exchange AG – SwissAtMid
XSWX	Market Identifier Code for SIX Swiss Exchange AG

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