



# SWXess Maintenance Release

SMR10 Release Guide (Version 3.00)

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# 1 Introduction




## 1.1 Purpose and Scope

This document provides all relevant information for SMR10 including functional and technical changes, regulatory impact, relevant documents and artefacts, configuration changes, migration plan and testing activities.

This “**Release Guide**” replaces the former documents “Release Notes” and “Participant Readiness”.

## 1.2 Structure of This Document

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

Audience	Major Sections
 <b>Business and Technical Audience</b>	2 Summary 3 Key Dates 7 Overview of Documents and Artefacts 8 Migration 8.3.4 Connectivity Testing Checklist During Production Migration
 <b>Business Audience</b>	4 Functional Changes 6 Regulatory Impact
 <b>Technical Audience</b>	5 Technical Changes

## 1.3 Changes Since Last Version

Version	Description
3.00	Information regarding the following topics added: <ul style="list-style-type: none"> <li>- Production Migration Schedule and Connectivity Checks</li> <li>- Updates in “Overview of Documents and Artefacts” section</li> <li>- Description regarding “Re-enablement following Order Score Breach”</li> <li>- Regulatory impact</li> <li>- Matching Scenarios</li> </ul>

## 1.4 References

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

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Find further contact information in the [Swiss Stock Exchange Contact Center](#) of the Swiss Stock Exchange website.

## 2 Summary



### Business and Technical Audience

### 2.1 Introduction

The Swiss Stock Exchange will introduce a new maintenance release of its SWXess trading platform. The SWXess Maintenance Release 10 (SMR10) is a **mandatory** release for SWXess participants.

The key facts of SMR10 are summarized below:

- Introduction of new order type "SwissAtMid Block Order" for Blue Chip Shares and Mid-/Small-Cap Shares for the trading service "SwissAtMid"
  - Integration of SwissAtMid Block Order functionality within the SIX Trading User Interface
- Enhancements to the "Quote on Demand" trading service
  - Extension of QOD Requests to OUCH Trading Interface (OTI)
  - Extension of QOD Quotes to OUCH Trading Interface (OTI)
  - Delayed Publication for large in scale QOD trades
  - Possibility to override the Auto-Execute duration for QOD Auctions with a configurable custom value
  - Integration of QOD UI within the SIX Trading User Interface
- Different Pre-Trade Control values per trading service and trading segment
- Stop Trading after Non-Opening in the Quote Driven Market (QDM) and Price Validation Market (PVM)
- Change of enumerators for Trade Flag "LastLiquidityInd"
- New "Minimum Execution Quantity" field in OUCH Trading Interface (OTI)
- Cancellations of Off Order Book and Off Exchange trades by participants and reporting members
- New Trade Type "Derivative Hedge" for Trade Reports
- SCAP Bandwidth Offering expanded beyond 100 Mbps
- Changes to the Sponsored Access (SA) FIX Drop Copy Interface
  - New attribute "OrdType"
  - Harmonization of enumerators for "BookType"
- Partial removal of attribute "Symbol" (FIX Tag 55) in FIX interfaces
- Additional (SHA-512) Checksum File for RDI Files
- Bug fixing

SMR10 is confirmed to go live in the **Membertest environment with the following staged approach:**

Stage	Date	Comments
Stage 1	30 August 2021	Functional Changes Contains mandatory interface changes
Stage 2	4 October 2021	Functional Changes Contains mandatory interface changes
Stage 3 (final stage)	1 November 2021	Functional Changes Contains <b>no</b> mandatory interface changes



The go live in the **Production Environment** will take place **with the following approach:**

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<b>Date</b>	<b>Comments</b>
6 December 2021	Functional Changes Contains mandatory interface changes Entry into force of changes to trading regulations

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
















For further information on the stages and the functionalities contained please refer to section 3.





















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## 2.2 SMR10 Matrix Changes vs Interfaces and Services

The table below shows the changes introduced with SMR10 and the impact on interfaces and services.

	= business change	Click on the section number to go to the business description.
	= technical change	Click on the section number to go to the technical description.
	= not affected	

SWXess Interfaces and Services															
Changes	OTI	QTI	IMI	STI	SIX MDDX	TDI	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	XBTR - Bilateral Trading Platform	Billing Report Interface	SCAP
SwissAtMid Block Orders	 4.1			 4.1		 4.1	 4.1.3.3	 4.1			 4.1	 4.1		 4.1.17.1	
Membertest stage 1 Production	 5.2.1			 5.2.2 5.2.3		 5.2.4	 5.6.5	 5.2.7			 5.2.5	 5.2.6			
Different Pre-Trade Control Parameters						 4.2.1									
Membertest stage 1 Production						 5.3.1									
Enhancements QOD Service	 4.2.2		 4.2.2	 4.2.2	 4.2.2.3		 4.2.2				 4.2.2				
Membertest stages 2 and 3 Production	 5.3.2.1		 5.3.2.2		 5.3.2.4						 5.3.2.3				
Stop Trading after Non-Opening in the QDM and PVM			 4.2.3												
Membertest stage 3 Production															
Change of Enumerators for Trade Flag "LastLiquidityInd"				 4.2.4							 4.2.4				
Membertest stage 1 Production				 5.3.3.1							 5.3.3.2				
New "Minimum Execution Quantity" field in OUCH Trading Interface (OTI)	 4.2.5														
Membertest stage 1 Production	 5.2.1 5.3.4														

SWXess Interfaces and Services															
Changes	OTI	QTI	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	XBTR - Bilateral Trading Platform	Billing Report Interface	SCAP
Off Book Cancellations by Participants				 4.3.1	 4.3.1						 4.3.1			 4.3.1	
Membertest stage 1															
Production				5.4.1.1 5.4.1.2	5.4.1.4						5.4.1.3				
New Trade Type "DerivativeHedge"				 4.3.2											
Membertest stage 1															
Production				5.4.2											
Changes Sponsored Access FIX Drop Copy Interface								 4.6.1							
Membertest stage 1															
Production								5.2.7 5.6.4							
Partial removal of Symbol (FIX Tag 55)				 5.5				 5.5					 5.5		
Membertest stage 1															
Production															
Other Changes				 5.6.1		 5.6.3 5.6.3.1	 5.6.5	 5.6.4					 5.6.2		 4.5.1

## 3 Key Dates



### Business and Technical Audience

The following table shows the key dates of SMR10 as scheduled at this stage:

Date	Test	Prod	Activity
3 May 2021	☑	☑	Initial Announcement of SMR10 and publication of affected SWXess interface specifications
20 August 2021	☑	☑	Publication of updated SMR10 Release Guide
27/28 August 2021	☑		SMR10 Membertest Migration weekend stage 1
29 August 2021	☑		Contingency Day – SMR10 Membertest Migration stage 1
<b>30 August 2021</b>	☑		<b>SMR10 Membertest stage 1 live date and first trading day includes:</b> <ul style="list-style-type: none"> <li>- SwissAtMid Block Orders</li> <li>- Different Pre-Trade Control Values per Trading Segment and Trading Service</li> <li>- Cancellations of Off Order Book and Off Exchange Trades by Participants</li> <li>- New Trade Type “DerivativeHedge” for Trade Reports</li> <li>- Changes to the Sponsored Access (SA) FIX Drop Copy Interface</li> <li>- Change of enumerators for Trade Flag “LastLiquidityInd”</li> <li>- New minimum execution quantity (MEQ) field in OTI</li> <li>- Replacement of QOD UI with the SIX Trading User Interface</li> <li>- Introduction of Additional Checksum File for RDI files</li> <li>- Partial removal of attribute “Symbol” (FIX Tag 55) in FIX interfaces</li> </ul>
8 September 2021	☑		Intraday Recovery Test - FIX Infrastructure down (Deal Pool and SWXess)
15 September 2021	☑		Intraday Recovery Test – OBM partition 1 down
1/2 October 2021	☑		SMR10 Membertest Migration weekend stage 2 <b>Contains mandatory interface changes</b>
3 October 2021	☑		Contingency Day – SMR10 Membertest Migration stage 2
4 October 2021	☑		<b>SMR10 Membertest stage 2 live date and first trading day includes:</b> <ul style="list-style-type: none"> <li>- Extension of QOD Requests to OUCH Trading Interface (OTI)</li> <li>- Extension of QOD Quotes to OUCH Trading Interface (OTI)</li> <li>- New field “Execution Time” for Delayed Publication for QOD is technically present but not available functionally</li> </ul>
6 October 2021	☑		Intraday Recovery Test – OBM partitions 1 and 2 down
9 October 2021	☑		Performance Test
13 October 2021	☑		Intraday Recovery Test – OBM partition 2 down
20 October 2021	☑		Intraday Recovery Test – FIX Infrastructure down
27 October 2021	☑		Intraday Recovery Test – MDDX Infrastructure down
29/30 October 2021	☑		SMR10 Membertest Migration weekend stage 3 <b>Contains no mandatory interface changes</b>
31 October 2021	☑		Contingency Day – SMR10 Membertest Migration stage 3

1 November 2021	<input checked="" type="checkbox"/>		<p><b>SMR10 Membertest stage 3 live date and first trading day includes:</b></p> <p>Membertest environment now includes the following additional functionality:</p> <ul style="list-style-type: none"> <li>- Delayed Publication for QOD Trades</li> <li>- Stop Trading after Non-Opening in the QDM and PVM</li> <li>- Override QOD Auto-Execute duration with a configurable custom value</li> <li>- Bug fix release of TradeGuard (RX User GUI)</li> </ul>
3 November 2021	<input checked="" type="checkbox"/>		Intraday Recovery Test – OBM partitions 1 and 2 down
8 November 2021	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Publication of updated Rules, Directives and Guidelines for SMR10 Production
20 November 2021	<input checked="" type="checkbox"/>		Performance Test
24 November 2021	<input checked="" type="checkbox"/>		Intraday Recovery Test – OBM partition 2 down
<b>4/5 December 2021</b>		<input checked="" type="checkbox"/>	<p><b>SMR10 Production Migration weekend</b></p> <p><b>Contains mandatory interface changes</b></p>
<b>6 December 2021</b>		<input checked="" type="checkbox"/>	<p><b>SMR10 Production live date and first trading day includes:</b></p> <ul style="list-style-type: none"> <li>- SwissAtMid Block Orders</li> <li>- Different Pre-Trade Control Values per Trading Service and Trading Segment</li> <li>- Cancellations of Off Order Book and Off Exchange Trades by Participants</li> <li>- New Trade Type “DerivativeHedge” for Trade Reports</li> <li>- Changes to the Sponsored Access (SA) FIX Drop Copy Interface</li> <li>- Change of enumerators for Trade Flag “LastLiquidityInd”</li> <li>- New minimum execution quantity (MEQ) field in OTI</li> <li>- Replacement of QOD UI with the SIX Trading User Interface</li> <li>- Introduction of Additional Checksum File for RDI files</li> <li>- Partial removal of attribute “Symbol” (FIX Tag 55) in FIX interfaces</li> <li>- SCAP Bandwidth Offering expanded beyond 100 Mbps</li> <li>- Delayed Publication for QOD Trades</li> <li>- Stop Trading after Non-Opening in the QDM and PVM</li> <li>- Override QOD Auto-Execute duration with a configurable custom value</li> <li>- Extension of QOD Requests to OUCH Trading Interface (OTI)</li> <li>- Extension of QOD Quotes to OUCH Trading Interface (OTI)</li> </ul>

## 4 Functional Changes

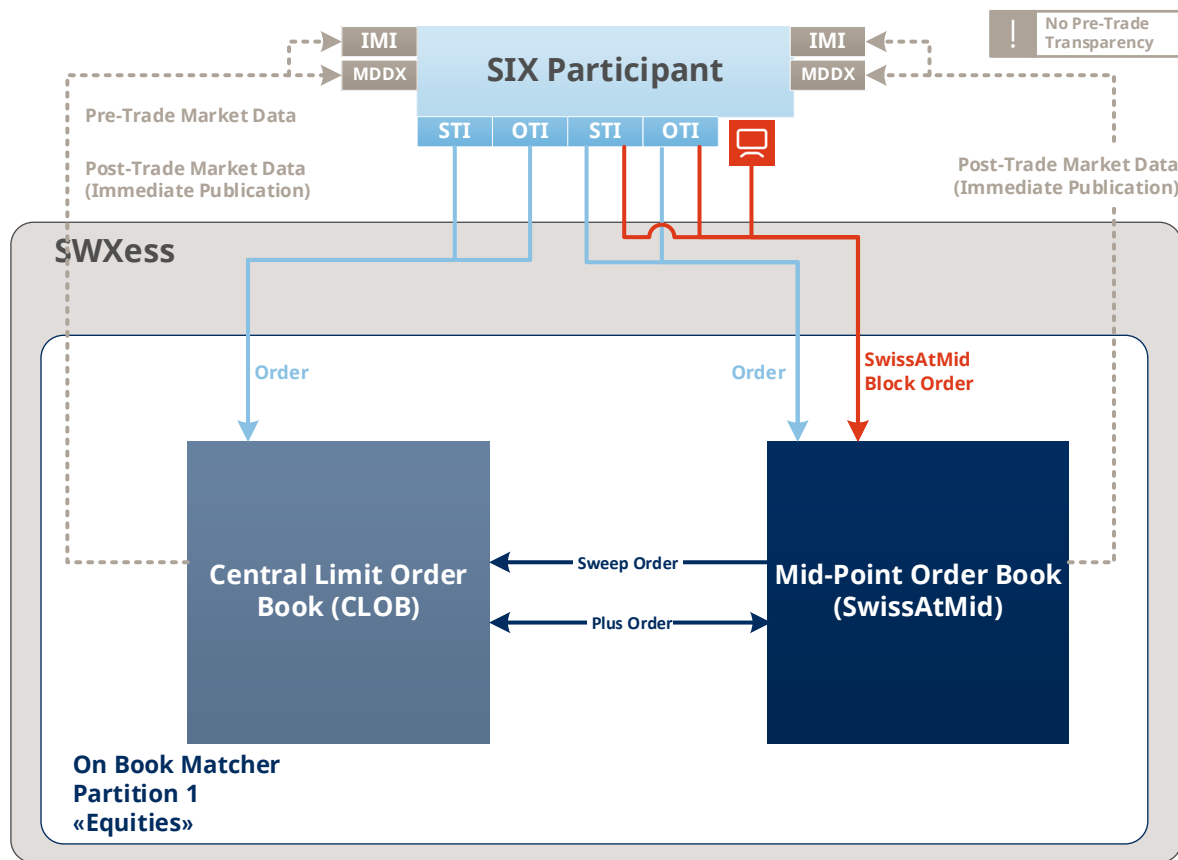


Business and Technical Audience

### 4.1 SwissAtMid Block Orders

SIX Swiss Exchange is introducing a new Block Order type for the on exchange non-displayed trading service “SwissAtMid”. This new order type will offer order entry and execution of indicative and binding Block Orders at or above a pre-defined Minimum Block Order Value Threshold (Large In Scale) defined per security.

The new SwissAtMid Block Order type allows participants to enter either Indicative Block orders or Binding Block orders. Indicative Block orders are indications of interest and need to be firmed-up before they can execute. They allow for block discovery and enhanced order management as larger Block orders can be worked simultaneously across multiple venues where liquidity is fragmented, without the risk of double fill or overfill. When a potential match is found a Firm-up Request will be sent to the participant which automatically cancels the Indicative Order and triggers a Firm-up Phase in which the participant may submit a firmed-up Block order to execute. Binding Block orders are firm upon submission and can therefore execute at any time.



RED = New with SMR10

Figure 1 Overview SwissAtMid Block Orders

**SwissAtMid Block Orders Supported for:**

Trading Interfaces	<ul style="list-style-type: none"> <li>- Standard Trading Interface (STI)</li> <li>- OUCH Trading Interface (OTI)</li> <li>- SIX Trading User Interface</li> </ul>
Market Data Interfaces	<ul style="list-style-type: none"> <li>- SIX Multi-Dimensional Data FluX Interface (SIX MDDX)</li> <li>- ITCH Market Data Interface (IMI)</li> </ul>
On Book Matcher	<ul style="list-style-type: none"> <li>- On Book Matcher – Partition 1 “Equities”</li> </ul>
Trading Segments	<ul style="list-style-type: none"> <li>- Blue Chip Shares (25)</li> <li>- Mid-/Small-Cap Shares (591)</li> </ul>
Trading Period	<ul style="list-style-type: none"> <li>- Continuous Trading</li> </ul>
Market Model	<ul style="list-style-type: none"> <li>- Mid-Point Order Book (MPOB)</li> </ul>
Order Type	<ul style="list-style-type: none"> <li>- SwissAtMid Indicative Block Order</li> <li>- SwissAtMid Binding Block Order</li> </ul>
Routing Instructions	<ul style="list-style-type: none"> <li>- SwissAtMid Block Order (SWML)</li> </ul>
Price Type	<ul style="list-style-type: none"> <li>- Market</li> <li>- Limit</li> </ul>

### 4.1.1 Participation

All participants of SIX Swiss Exchange can enter SwissAtMid Block Orders to the Mid-Point Order Book by flagging the orders with the Routing Instruction “SWML” (SwissAtMid Block Orders). No additional subscription or special configuration for the new service is required.

### 4.1.2 Securities

SIX Swiss Exchange will enable SwissAtMid Block Orders for the following Trading Segments:

Trading Segment ID	Trading Segment Name	Reference to Trading Parameters Guideline
25	Blue Chip Shares	<a href="#">Annex A – Blue Chip Shares</a>
591	Mid-/Small Cap Shares	<a href="#">Annex B – Mid-/Small-Cap Shares</a>

 **Important Note**

SIX Swiss Exchange will reject SwissAtMid Block Orders entered for Trading Segments which are not enabled for the SwissAtMid trading service.

SIX Swiss Exchange has introduced the following new attribute in the Reference Data Interface (RDI) in order to facilitate the identification of the Trading Segments enabled for SwissAtMid Block Orders:

RDI File Description	Attribute	Type
TradingSegment	blockOrderFlag	Boolean

 **Further Reading**

Reference Data Interface (RDI) Specification (Version 2.26.0)

 Please go to section 5.2 for a detailed technical description.

## 4.1.3 Technical Connectivity

### 4.1.3.1 SWXess Trading Services

The submission of SwissAtMid Block Orders is supported via Standard Trading Interface (STI), OUCH Trading Interface (OTI), as well as via the SIX Trading User Interface provided by SIX Swiss Exchange.



#### Further Reading

- Standard Trading Interface (STI) Specification - Orders and Executions (Version 2.63.0)
- OUCH Trading Interface (OTI) Specification (Version 1.6.0)
- User Manual for SIX Trading User Interface version 1.10

### 4.1.3.2 Market Data Dissemination

Participants will receive post-trade information from the SwissAtMid Block Order type via ITCH Market Data Interface (IMI) as well as via MDDX Multi-Dimensional Data FluX™ Interface.



#### Important Note

Please note that like all SwissAtMid orders, SwissAtMid Block Orders are subject to a pre-trade transparency waiver and therefore no pre-trade market information will be disseminated via IMI and SIX MDDX.



#### Further Reading

- ITCH Market Data Interface (IMI) Specification (Version 1.7.2)
- SIX MDDX Interface Specification (Version 1.23.0)

### 4.1.3.3 SIX Trading User Interface

SIX Swiss Exchange will provide a web-based user interface called "SIX Trading User Interface", which will support all the functionalities required for submitting, maintaining and deleting SwissAtMid Block Orders within the SwissAtMid Block order section of this User Interface.

The functionality will be delivered in stages during Membertest as follows:

Stage	Features
Stage 1	<ul style="list-style-type: none"> <li>- Enter, view and update Binding Block orders</li> <li>- Enter view and update Indicative Block orders</li> </ul>
Stage 2	<ul style="list-style-type: none"> <li>- View and accept Firm-up Requests (leading to Firmed-up Block orders)</li> <li>- View order history</li> <li>- View trade history</li> </ul>
Stage 3	View Firm-up requests as pop-up notifications

All Membertest functionality will go live on the same date with the Production migration.



#### Important Note

The SIX Trading User Interface will not support submission, maintenance and deletion of any other type for on-order-book trading (for example Normal Orders, Sweep Orders, Plus Orders).





### Further Reading

Please find further information about the SIX Trading User Interface access and functionality in the SIX Trading User Interface Manual:

[https://secure.six-swiss-exchange.com/member\\_section/it/manuals.html](https://secure.six-swiss-exchange.com/member_section/it/manuals.html)



If you are interested in using the SIX Trading User Interface, please request access by submitting the [Application for SIX Trading User Interface](#) to Member Services ([member.services@six-group.com](mailto:member.services@six-group.com)).

## 4.1.4 SwissAtMid Block Order

### 4.1.4.1 Order Type

The new SwissAtMid Block Order type supports three new order conditions:

Order Condition	Indicative	Firmed-up	Binding
Description	<p>Non-firm</p> <p>Indicative Block Orders are non-executable Block orders.</p> <p>If a potential match is available in the SwissAtMid trading service, a Firm-up Request is sent to the participant and their Indicative Block Order is automatically canceled. The Firm-up Request invites them to participate in a Firm-up Phase in which they can enter a Firmed-up Block order which references the original Indicative Block Order.</p>	<p>Firm</p> <p>Firmed-up Block Orders are firm Block orders, entered during a Firm-up Phase, following receipt of a Firm-up request and automatic cancellation of the related Indicative Block Order. Firmed-up Block Orders must reference the original Indicative Block Order.</p>	<p>Firm</p> <p>Binding Block Orders are firm orders at entry and require no firm-up in order to execute. They are immediately available to matching in the SwissAtMid order book.</p>
Condition for Matching	<ul style="list-style-type: none"> <li>No matching is possible</li> <li>Potential matches are identified, and Firm-up Requests sent</li> </ul>	<p>Matching is in accordance with the Mid-Point Order Book size/time priority and subject to Minimum Block Value Threshold constraints.</p>	<p>Matching is in accordance with the Mid-Point Order Book size/time priority and subject to Minimum Block Value Threshold constraints.</p>

### 4.1.4.2 Firm-up Process

When a potential match is identified for an Indicative Block Order, the participant receives a Firm-up Request which initiates a Firm-up Phase. At the same time the Indicative Block Order is automatically canceled.



#### Important Note

Please note that Indicative Block Orders only interact with resting SwissAtMid liquidity. This means the following orders in SwissAtMid do not trigger firm-up Phases for Indicative Block Orders:

- Normal Orders in SwissAtMid with Validity "Immediate or Cancel" or "Fill or Kill"
- Normal Orders with Routing Instruction "SWMX" (Sweep) or "SEB" (Swiss EBBO)
- Binding Block Orders with Validity "Immediate or Cancel" or "Fill or Kill"

Matching of Firmed-up Block orders as a result of a Firm-up Phase may take place against any of the following orders which do not have validity "Fill or Kill" or "Immediate or Cancel":

- Firmed-up Block orders entered in this Firm-up Phase (exception - these can be Fill or Kill or Immediate or Cancel)
- Firmed-up Block orders resting in the order book
- Binding Block orders
- SwissAtMid Normal orders
- SwissAtMid Iceberg orders
- Iceberg Plus orders
- Limit Plus orders

If Firmed-up block orders are not matched or only partially matched at the end of the Firm-up Phase, the residual will rest in the SwissAtMid Order Book. The exception is for Firmed-up Block orders with validity "Immediate or Cancel" or "Fill or Kill", which, if not fully executed at the end of the Firm-up Phase, will automatically expire.

Residual Firmed-up Block orders resting in the SwissAtMid orderbook (not Fill or Kill or Immediate or Cancel), and Binding Block orders (not Fill or Kill or Immediate or Cancel), can simultaneously match outside of the Firm-up Phase with resting or immediate liquidity in the SwissAtMid order book. This means they can match against any of the following orders:

- Firmed-up Block orders resting in the order book
- Binding Block orders
- SwissAtMid Normal orders
- SwissAtMid Iceberg orders
- Iceberg Plus orders
- Limit Plus orders
- Sweep orders sweeping into the SwissAtMid Order Book (SWMX)
- EBBO orders sweeping into the SwissAtMid Order Book

Immediate Firmed-up Block orders in the SwissAtMid orderbook (Fill or Kill or Immediate or Cancel), and immediate Binding Block orders (Fill or Kill or Immediate or Cancel), cannot take part in Firm-up Phases and can only match against resting or immediate liquidity in the SwissAtMid order book.

The participation of SwissAtMid Block Orders in Firm-up Phases depends on the condition of the Block Order. Firmed-up orders entered during a Firm-up Phase are "locked" for the duration of the Firm-up Phase which means that they cannot match or participate in any other Firm-up Phase during this time. This does not apply to residual Firmed-up Block Orders resting in the SwissAtMid Order Book (remaining quantity from earlier Firm-up Phases) or Binding Block Orders. When these orders take part in a Firm-up Phase, they are not "locked" in that Firm-up Phase but are free to simultaneously execute with other liquidity in the SwissAtMid order book.

Multiple parallel Firm-up Phases are supported per security in the SwissAtMid order book. However a single Indicative and Firmed-up Block Order may only participate in a single Firm-up Phase at the same time. Binding Block Orders can trigger a single Firm-up Phase at a time but since they are firm, they can execute at any time.

Find below an overview of the SwissAtMid Block Order Firm-up process:

Attribute	Indicative Block Orders	Firmed-up Block Orders	Binding Block Orders	Normal and Iceberg SwissAtMid Orders
Triggering of Firm-up Requests	May trigger multiple Firm-up Requests to be sent to other indicative Block Orders to participate in the same Firm-up Phase.	<p>Firmed-up Block orders entered as part of a Firm-up Phase and “locked” in the Firm-up phase may not trigger any Firm-up Requests.</p> <p>Residual Firmed-up Block orders resting in the SwissAtMid (not Fill or Kill or Immediate or Cancel) can trigger multiple Firm-up Requests over the course of the trading day but only one at a time.</p>	<p>Binding Block orders with validity Day or GTD may trigger multiple Firm-up Requests over the course of the trading day but only one at a time.</p> <p>Binding Block orders which are Fill or Kill or Immediate or Cancel can never trigger Firm-up Requests.</p>	<p>Normal SwissAtMid orders (SWM) of block value, with validity Day or GTD as well as normal and iceberg orders with routing instruction Plus (SWMB) with validity Day may trigger multiple Firm-up Requests over the course of the trading day but only one at a time</p> <p>SwissAtMid Normal orders can never trigger Firm-up Requests if they are either:</p> <ul style="list-style-type: none"> <li>- Fill or Kill</li> <li>- Immediate or Cancel</li> <li>- Sweep orders (SWMX)</li> <li>- EBBO orders</li> </ul>
Participation in Firm-up Phases	Indicative Block orders are canceled upon the start of a Firm-up Phase. Firm-up has to be done by entering new Firmed-up Block orders which are “locked” for the duration of the Firm-up Phase.	<p>A Firmed-up Block order entered as part of a Firm-up Phase is “locked” in the Firm-up Phase.</p> <p>However, a residual Firmed-up Block order may participate in more than one Firm-up Phase over the course of the day if not fully executed or expired in their first Firm-up Phase.</p>	<p>Binding Block orders with validity Day or GTD may participate in more than one Firm-up Phase over the course of the day but only one at a time.</p> <p>Binding Block orders with validity Day or GTD may participate in a Firm-up Phase without being “locked” in the Firm-up Phase. This means they can at the same time interact with liquidity in the SwissAtMid Order Book</p> <p>Binding Block orders with validity Immediate or Cancel or Fill or Kill cannot participate in a Firm-up Phase.</p>	<p>Normal SwissAtMid orders (SWM) of block value, with validity Day or GTD as well as normal and iceberg orders with routing instruction Plus (SWMB) with validity Day, may trigger multiple Firm-up Requests over the course of the trading day but only one at the same time.</p> <p>Normal SwissAtMid orders (SWM) of block value, with validity Day or GTD as well as normal and iceberg orders with routing instruction Plus (SWMB) with validity Day may participate in a Firm-up Phase without being “locked” in the Firm-up Phase. This means they can at the same time interact with liquidity in SwissAtMid.</p> <p>SwissAtMid Normal orders can never participate in Firm-up Phases if they are either:</p> <ul style="list-style-type: none"> <li>- Immediate or Cancel</li> <li>- Fill or Kill</li> <li>- Sweep orders (SWMX)</li> <li>- EBBO orders (SEB).</li> </ul>

When a Firmed-up Block Order is entered, participants must always provide a reference to the related canceled Indicative Block Order. When the Firmed-up Block Order is entered in response to a Firm-up Request, this reference is relevant for calculating the Performance Score (see section 4.1.6).

Participants are informed about Firm-up Phases as follows:

Interface	Message	Attribute
STI	"Execution Report" (MsgType=8)	ExecType = "L" (Triggered) (FIX Tag 150) (new enumerator)
OTI	"Firm-up Request Message" [F] (new)	-

Participants are asked to provide the reference to the canceled Indicative Block Orders during the Firm-up Phase as follows:

Interface	Message	Attribute
STI	"New Order Single" (MsgType=D)	"ClOrdLinkID" (FIX Tag 583)
OTI	Enter Order Message" [O]	Order Link Token (new)



#### Further Reading

- Standard Trading Interface (STI) Specification - Orders and Executions (Version 2.63.0)
- OUCH Trading Interface (OTI) Specification (Version 1.6.0)

### 4.1.4.3 Firm-up Phase

The maximum length of time given to a participant to enter a Firmed-up Block Order during a Firm-Up Phase is determined by whether the Indicative Block Order is being managed manually or by an automatic trading system. Participants who are managing their Indicative Block Orders manually are given more time in which to firm-up their orders. Where a mix of manual and automated Indicative Block Orders are part of a potential match in SwissAtMid, the manually managed orders are invited to firm-up their orders first before a Firm-Up Request is sent to the automated Indicative Block Orders. This ensures that participants managing their orders manually are not disadvantaged during the firm-up process.

SIX Swiss Exchange supports two SwissAtMid Block Order indicators:

- Manual
- Automated

Participants submitting Indicative Block Orders via the Standard Trading Interface (STI) can choose to mark their Indicative Block Orders as either "Manual" or "Automated". Indicative Block Orders submitted via the OUCH Trading Interface (OTI) are automatically classified as Automated, whilst Indicative Block Orders entered via the SIX Trading User Interface are automatically classified as Manual.



#### Important Note

Binding Block Orders do not require the order indicator since they do not need to be firm-up.

Firm-up Phases will terminate earlier than the maximum defined interval if all invited Indicative Block Orders have already entered a corresponding Firmed-up Block order or if the Firm-up Phase is canceled due to a match break situation that cannot be rectified during the Firm-up Phase interval or to a trading interruption.



Match break situation refers to when a Firmed-up Block order is unable to match at the end of the Firm-up Phase because:

- the Firmed-up Block order is canceled or amended during the Firm-up Phase in such a way that it can no longer match with the other orders in the Firm-up Phase
- the other orders in the Firm-up Phase that would have potentially matched with the Firmed-up Block order are matched in the meantime in the SwissAtMid order book
- the Mid-point price of the corresponding security has changed so that the Firmed-up Block order is no longer in-limit

Find below an overview of the Firm-up Phase intervals:

Attribute	Manual Indicative Block Orders only	Automated Indicative Block Orders only	Mix of Manual and Automatic Indicative Block Orders
Description	30 seconds plus a maximum of 50 milliseconds "Random Matching Time"	450 milliseconds plus a maximum of 50 milliseconds "Random Matching Time"	30 seconds plus a maximum of 50 milliseconds "Random Matching Time" And 450 milliseconds plus a maximum of 50 milliseconds "Random Matching Time" Manual orders are given the opportunity to firm-up first. Only after all the manual orders have firm-ed-up or the maximum Firm-up Interval is expired will the Firm-Up Requests be sent out for the automatic orders.

SIX Swiss Exchange has introduced the following new attributes in the Reference Data Interface (RDI) for the Firm-Up Phase Interval times for SwissAtMid Block trading:

File/Message	Attribute	Type
TradingSegment.txt	randomizedBlockOrderInterval	Integer-5
	automatedBlockOrderFirmUpInterval	Integer-5
	manualBlockOrderFirmUpInterval	Integer-5



Please go to section 5.2.4 for a detailed technical description.



### Further Reading

Reference Data Interface (RDI) Specification (Version 2.26.0)

#### 4.1.4.4 Block Order Specification

Find below an overview of the SwissAtMid Block Order specifications:

Attribute	Indicative Block Order	Binding Block Order
Interface	<ul style="list-style-type: none"> <li>- Standard Trading Interface (STI)</li> <li>- Order Trading Interface (OTI)</li> <li>- SIX Trading User Interface</li> </ul>	<ul style="list-style-type: none"> <li>- Standard Trading Interface (STI)</li> <li>- Order Trading Interface (OTI)</li> <li>- SIX Trading User Interface</li> </ul>
Routing Instruction (Order Placement)	<ul style="list-style-type: none"> <li>- SWML – SwissAtMid Block Order</li> </ul>	<ul style="list-style-type: none"> <li>- SWML – SwissAtMid Block Order</li> </ul>
Order Type	<ul style="list-style-type: none"> <li>- SwissAtMid Indicative Block Order</li> </ul>	<ul style="list-style-type: none"> <li>- SwissAtMid Binding Block Order</li> </ul>
Order Condition	<ul style="list-style-type: none"> <li>- Indicative</li> <li>- Firmed-up</li> </ul>	<ul style="list-style-type: none"> <li>- Binding</li> </ul>
Side	<ul style="list-style-type: none"> <li>- Buy</li> <li>- Sell</li> </ul>	<ul style="list-style-type: none"> <li>- Buy</li> <li>- Sell</li> </ul>
Price Type	<ul style="list-style-type: none"> <li>- Market</li> <li>- Limit</li> </ul>	<ul style="list-style-type: none"> <li>- Market</li> <li>- Limit</li> </ul>
Price	Price is defined per unit of quantity	Price is defined per unit of quantity
Quantity	Total number of units	Total number of units
Value	<p>Must be equal or greater than the Minimum Block Order Threshold (LIS) of the respective security.</p> <p>If the remaining quantity of a Block Order falls below the Minimum Block Order Threshold, the order is deleted.</p>	<p>Must be equal or greater than the Minimum Block Order Threshold (LIS) of the respective security.</p> <p>If the remaining quantity of a Block Order falls below the Minimum Block Order Threshold, the order is deleted.</p>
Display Quantity	<p>Not supported</p> <p>Iceberg Block orders are not supported</p>	<p>Not supported</p> <p>Iceberg Block orders are not supported</p>
Minimum Execution Quantity	<p>Supported</p> <p>A single order on the other side of the order book must be equal or greater than the MEQ for an execution to occur. The MEQ must be met on each trade and for Block orders the resulting trade value must be at or above the Minimum Block Order Value Threshold.</p> <p>When the remaining quantity of an order falls below the MEQ, then the MEQ corresponds to the remaining order quantity.</p>	<p>Supported</p> <p>A single order on the other side of the order book must be equal or greater than the MEQ for an execution to occur. The MEQ must be met on each trade and for Block orders the resulting trade value must be at or above the Minimum Block Value Threshold.</p> <p>When the remaining quantity of an order falls below the MEQ, then the MEQ corresponds to the remaining order quantity.</p>

Attribute	Indicative Block Order	Binding Block Order
Order Indicator	<ul style="list-style-type: none"> <li>- Manual</li> <li>- Automated</li> </ul>	Not applicable
Validity	Indicative <ul style="list-style-type: none"> <li>- Good for Day</li> <li>- Good till Date (<i>only supported via STI or SIX Trading User Interface</i>)</li> </ul> Firmed-up <ul style="list-style-type: none"> <li>- Good for Day</li> <li>- Immediate or Cancel</li> <li>- Fill or Kill</li> <li>- Good till Date (<i>only supported via STI or SIX Trading User Interface</i>)</li> </ul>	<ul style="list-style-type: none"> <li>- Good for Day</li> <li>- Immediate or Cancel</li> <li>- Fill or Kill</li> <li>- Good till Date (<i>only supported via STI or SIX Trading User Interface</i>)</li> </ul>
Trading Capacity	<ul style="list-style-type: none"> <li>- Riskless Principal</li> <li>- Principal</li> </ul>	<ul style="list-style-type: none"> <li>- Riskless Principal</li> <li>- Principal</li> </ul>
Self-Match Prevention	Supported <i>Firm-up Requests are not sent where the SMP would be triggered</i>	Supported
Price Steps	0.0001 independent of price Significant Price Decimals = 4	0.0001 independent of price Significant Price Decimals = 4
Order Link	Not applicable for Indicative order condition. Required for Firmed-up order condition.	Not applicable
Pre-Trade Transparency	No	No
Persistency	In the event of an Intraday Recovery, STI and or SIX Trading User Interface orders are persisted, but OTI orders are deleted.	In the event of an Intraday Recovery, STI and SIX Trading User Interface orders are persisted, but OTI orders are deleted.

Find below an overview of the changes to order entry in the **Standard Trading Interface (STI)**:

“New Order Single” (MsgType=D) message

- Participants can define the entry of SwissAtMid Block Orders with “SWML” in the existing attribute “Routing Instruction” (FIX Tag 9487) in the “New Order Single” (MsgType=D) message.
- Participants can define whether their order is Manual (“Y”) or Automated (“N”) in the new attribute “ManualOrderIndicator” (FIX Tag 1028) in the “New Order Single” (MsgType=D) message.
- Participants can define the Identifier for the Indicative Block order which is being firm-ed-up by a Firm-ed-up Block order in the new attribute “ClOrdLinkId” (FIX Tag 583) in the “New Order Single” (MsgType=D) message.
- Participants can define the Order Condition as “Indicative”, “Firm-ed-up” or “Binding” in the new attribute “OrderCondition” (FIX Tag 27001) in the “New Order Single” (MsgType=D) message.

Find below an overview of the changes to order entry in the **OUCH Trading Interface (OTI)**:

- Participants can define the entry of SwissAtMid Block Orders with “L” in the existing attribute “Order Placement” in the “Enter Order Message” [O]
- Participants can define the Identifier for the Indicative Block order which is being firm-ed-up by a Firm-ed-up Block order in the new attribute “Order Link Token” in the “Enter Order Message” [O]
- Participants can define the Order Condition as Indicative (“1”), Firm-ed-up (“3”) or Binding (“2”) in the new attribute “OrderCondition” in the “Enter Order Message” [O]



### Further Reading

- Standard Trading Interface (STI) Specification - Orders and Executions (Version 2.63.0)
- OUCH Trading Interface (OTI) Specification (Version 1.6.0)

## 4.1.4.5 Order Handling

Find below an overview of the SwissAtMid Block Order handling during the various states, periods and interruptions:

Type	CLOB State	MPOB State	Behavior SwissAtMid Block Orders
Trading Period	Pre-Opening	Primary Condition	<p>New SwissAtMid Block Orders are accepted and added to the order book according to size/time priority.</p> <p>SwissAtMid Block Orders with validity Immediate or Cancel/Fill or Kill are rejected.</p> <p>Amending SwissAtMid Block Orders is supported and they lose their time priority.</p> <p>Deleting SwissAtMid Block Orders is supported.</p> <p>No Firm-up Requests are sent out and therefore no Firm-up Phases are supported.</p>
	Opening	Primary Condition	<p>New SwissAtMid Block Orders are accepted and added to the order book according size/time priority.</p> <p>SwissAtMid Block Orders with validity Immediate or Cancel/Fill or Kill are rejected.</p> <p>Amending SwissAtMid Block Orders is supported and they lose their time priority.</p> <p>Deleting SwissAtMid Block Orders is supported.</p> <p>Matching of SwissAtMid Normal Orders and Binding Block Orders will be carried out. Subsequently Firm-up Requests will be sent for Indicative Block Orders.</p>
	Continuous Trading	Continuous Trading	<p>New SwissAtMid Block Orders are accepted and added to the order book according to size/time priority.</p> <p>Firm-up Requests for Indicative Block Order are sent immediately and Firm-up Phases started.</p> <p>Amending and deleting SwissAtMid Block Orders is supported and they lose their time priority.</p> <p>Firmed-up Indicative Block Orders and Binding Block Orders may execute at the mid-point.</p>
	Closing Auction	Primary Condition	<p>Open SwissAtMid Block Orders with validity Good-for-Day are expired.</p> <p>New SwissAtMid Block Orders with validity greater than current business day remain in the order book.</p>
	Trading-At-Last	Primary Condition	<p>Amending and deleting SwissAtMid Block Orders is supported and they lose their time priority.</p> <p>Running Firm-up Phases will be terminated and any Firmed-up Indicative Block Orders are added to the order book.</p>
	Post-Trading	Primary Condition	<p>New SwissAtMid Block Orders with validity Immediate or Cancel/Fill or Kill are rejected.</p> <p>New SwissAtMid Block Orders with validity greater than current business day are accepted and added to the order book according to size/time priority.</p> <p>No new Firm-up Requests are sent.</p>



Trading State	Suspension	Primary Condition	New SwissAtMid Block Orders are accepted and added to the order book according to size/time priority.
	Underlying Condition	Primary Condition	SwissAtMid Block Orders with validity Immediate or Cancel/Fill or Kill are rejected.
	Active	MPOB Suspension	Amending SwissAtMid Block Orders is supported and they lose their time priority. Deleting SwissAtMid Block Orders is supported.
Trading Interruptions	Delay Opening	Primary Condition	No new Firm-up Requests are sent and therefore no Firm-up Phases are supported.
	Stop Trading	Primary Condition	Running Firm-up Phases will be terminated and any Firmed-up Indicative Block Orders are added to the order book.
	Non-Opening	Primary Condition	When trading resumes, Firm-up Requests will be sent to Indicative Block Orders.
	Active	MPOB Stop Trading	
Extraordinary Situation	Break	Primary Condition	

#### 4.1.4.6 Minimum Block Order Value Threshold

SIX Swiss Exchange will implement a new pre-trade control parameter for SwissAtMid Block Orders:

- Minimum Block Order Value Threshold

All SwissAtMid Block Orders and resulting trades must be at or above the Minimum Block Order Value Threshold and the following rules apply:

- Block Orders entered below the Minimum Block Order Value Threshold (price x quantity) are rejected.
- If specified, the minimum execution quantity (MEQ) for a Block Order must result in trades at or above the Minimum Block Order Value Threshold.
- Partially filled Block Orders where the remaining value falls below the Minimum Block Order Value Threshold are automatically deleted.
- Block Orders may only match against resting orders on the contra side (whether Block Orders or Normal Orders) which are also at or above the Minimum Block Order Value Threshold.
- All trades involving a SwissAtMid Block Order must take place at or above the Minimum Block Order Value.
- The execution of a SwissAtMid Block order against multiple orders which are individually lower than the Minimum Block Order Value is not supported even if the resulting trades would in total be above Minimum Block Order Value.

The Minimum Block Order Value Threshold is determined by SIX Swiss Exchange and defined in Swiss Francs on a per security basis. For securities with a trading currency other than Swiss Francs, the order value is converted using the daily maintained exchange rate. The Minimum Block Order Value Threshold will generally be based on the Large in Scale (LIS) thresholds published by ESMA, but is a wholly independent value and may be set at a different level by SIX Swiss Exchange.

SIX Swiss Exchange has introduced the following new attribute in the Reference Data Interface (RDI) in order to facilitate identifying the Minimum Block Order Value for securities enabled for SwissAtMid Block trading:

File/Object	Attribute	Type
TradedInstrument	preTradeBlockThresholdChf	Integer-9



Please go to section 5.2.4 for a detailed technical description.



#### Further Reading

Reference Data Interface (RDI) Specification (Version 2.26.0)

## 4.1.5 Market Model and Matching Rules

### 4.1.5.1 SwissAtMid Market Model

SwissAtMid Binding and Firm-ed-up Block Orders are matched according to the matching rules of the Mid-Point Order Book (MPOB). Trades in the Mid-Point Order Book (MPOB) are matched at the arithmetic mean of the mid-point price of the primary best bid and offer (PBBO) in the SIX Swiss Exchange Central Limit Order Book (Primary Exchange) of the respective security at the time of execution.

For execution in the Mid-Point Order Book, only orders which are “in-limit” are considered. An order is considered to be “in-limit” if the limit price of the order is equal or better than the mid-point price of the Central Limit Order Book (CLOB) (i.e. the limit price for buy orders is equal or higher than the mid-point of the CLOB and the limit price for sell orders is equal or lower than the mid-point of the CLOB). Market orders are always considered to be “in-limit”.

Matching in the Mid-Point Order Book (MPOB) is based on the size/time priority. This principle means that the “in-limit” orders with the larger order quantity shall be executed first. Relevant for the size-time priority is the original Block order quantity at the time the order entered the Mid-Point Order Book. The original order quantity is relevant for the entire lifetime of the order even if the order was partially executed. In case the order quantity is updated, the new quantity entered is relevant for the size-time priority. For orders with the same quantity, the order received first shall also be executed first. In case the order is updated/replaced, the new timestamp assigned to the order is relevant for the time-priority evaluations.

### 4.1.5.2 Matching Rules for SwissAtMid Block Orders

Generally, the Matching Rules for SwissAtMid do not change with the introduction of the new SwissAtMid Block Order type. Firm-ed-up Block Orders and Binding Block Orders match according to size/time priority at the midpoint of the CLOB.

In addition to adhering to the Mid-Point Order Book matching rules, matching of SwissAtMid Block Orders is subject to Minimum Block Order Value Threshold constraints. Each (partial) execution resulting from SwissAtMid Block Orders must be equal or greater than the Minimum Block Order Value Threshold defined by SIX Swiss Exchange. For more information on the Minimum Block Order Value Threshold, please see section 4.1.4.6.



#### Important Note

Examples of matching scenarios of SwissAtMid Block Orders are included in Appendix C of this document.

### 4.1.6 Performance Scoring

Participants using Indicative Block Orders will be scored dynamically based on the quality of their responses to Firm-up requests. The reputational order score will be the basis for calculating the following two separate average scores:

- Participant Order Score
- Participant Order Score per ISIN

The reputational order score is always an integer value between 0 and 100 (in case of decimal places it shall be rounded up to the nearest decimal point). The initial value will be set to 100.

The reputational order score persists overnight and after an intraday recovery.

The last 100 order scores for the general Participant Score and the last 50 order scores for the ISIN Score are considered for the calculation.

Participants are informed about their Participant Order Score on each Firm-up Request as follows:

Interface	Message	Attribute
STI	"Execution Report" (MsgType=8)	ReputationalScore (FIX Tag 27002) (new)
OTI	"Firm-up Request Message" [F] (new)	Reputational Score (new)



#### Further Reading

- Standard Trading Interface (STI) Specification - Orders and Executions (Version 2.63.0)
- OUCH Trading Interface (OTI) Specification (Version 1.6.0)

### 4.1.6.1 Reputational Order Score

A participant's Reputational Order Score will be calculated on their response to each Firm-up Request based on the following attributes:

- Quality of Response
- Quality of Size
- Quality of Price
- Match Break

The score is calculated as follows:

$$\text{Reputational Order Score} = \text{Quality of Response} \times \text{Quality of Size} \times \text{Quality of Price} \times \text{Match Break}$$

### 4.1.6.2 Participant Order Score

The Participant Order Score is the average of the participant's last 100 Reputational Order Scores.

Participants whose Participant Order Score falls below the Participant Order Score Threshold as defined by SIX Swiss Exchange may be blocked from submitting any new Indicative or Firmed-up Block Orders. Any open Indicative Block Orders will be automatically deleted from the order book when the participant is blocked. Binding Block orders are not affected by the Performance Score and may continue to be entered.

When the blocking of the participant is subsequently lifted, the Participants Order Score value is set 10 points above the threshold which led to the blocking.

### 4.1.6.3 Participant Order Score Per ISIN

The Participant Order Score per ISIN is the average of the participant's last 50 Reputational Order Scores calculated in the particular ISIN.

Participants whose ISIN Score falls below the Participant Order Score per ISIN Threshold as defined by SIX Swiss Exchange will be automatically blocked from submitting new Indicative or Firmed-up Block Orders in the particular ISIN for the rest of the current trading day. Moreover, any open Indicative Block Orders in that ISIN will be automatically deleted. New Indicative Block Orders for other ISINs are still accepted and open Indicative Block Orders for other ISINs are not subject to the breach may also remain in the order book. Binding Block Orders are not affected by the Performance Score and may continue to be entered for any ISIN.

When the blocking of the participant is subsequently lifted, the Participants Order Score per ISIN value is set 10 points above the threshold which led to the blocking.

#### 4.1.6.4 Re-enablement Following an Order Score Breach

Participants who have been blocked from entering Indicative or Firmed-up Block Orders due to either an Order Score per ISIN Breach or an overall Order Score Breach may contact SIX Swiss Exchange to request to be re-enabled.

Participants who have been blocked due to an ISIN score breach, will be automatically re-enabled to enter Indicative Block orders again the following trading day. If participants wish to be re-enabled on the same day the breach occurred, they may request this by submitting the [Re-enablement for SwissAtMid Block Orders Form](#) to Member Services. Please note that participants who have already been blocked once that day in the same ISIN will need to wait until the following trading day for re-enablement.

Participants who have been blocked due to an Overall score breach will not be automatically re-enabled and will need to request to be re-enabled by submitting the [Re-enablement for SwissAtMid Block Orders Form](#) to Member Services. Upon receipt of a valid request, participants will be re-enabled to enter Indicative Block orders again on the next trading day.

Re-enablement requests for a Performance Score Breach in Production can only be made via the relevant application form. Telephone requests will be not be accepted.

In order for a re-enablement request via the application form to be granted, participants must confirm that the issue causing the Performance Score Breach has been addressed. Acceptable reasons for the Performance Score Breach are:

- Order sizing issue
- Latency issue
- Firm-Up link token issue
- Limit price issue
- Simultaneous race conditions issue
- Session disconnection issue

The re-enablement form should be signed by two independent signatories. Valid signatories include:

- Registered Traders (Trader IDs previously provided to Member Services for that Member)
- Registered Personal Contacts (list of contacts provided to Member Services as part of SIX Swiss Exchange Membership)

The two signatures may come from one of the categories above or from a combination thereof.

During the Membertest phase for SMR10 and subsequently in Membertest, Overall Score breaches will not result in a suspension. For the automatic ISIN Score Breaches occurring in the Membertest environment, re-enablement may be requested by contacting Member Services ([member.services@six-group.com](mailto:member.services@six-group.com) / +41 58 399 2473).

#### 4.1.7 Price Steps (Tick Size)

The price steps (tick size) for the SwissAtMid trading service also apply to SwissAtMid Block Orders. The valid price step amounts to 0.0001, regardless of the order price as defined in [Directive 5: Alternative Trading](#).

#### 4.1.8 Pre-Trade Controls

In addition to the Minimum Block Order Value Threshold, SwissAtMid Block Orders are validated against the following existing SwissAtMid Pre-Trade Controls:

- Price Collar
- Maximum Order Value
- Maximum Order Volume

These existing SwissAtMid pre-trade controls are available in a new file as part of the Reference Data Interface (RDI):

File/Object	Attribute	Type
-------------	-----------	------

PreTradeControl (new)	tradingSegmentId (new)	Id
PreTradeControl (new)	bookType (new)	Enumeration-4
PreTradeControl (new)	priceCollarFactor	Integer-9
PreTradeControl (new)	maxOrderValue	Amount

 Please go to section 5.3.1 for a detailed technical description.

 **Further Reading**

Reference Data Interface (RDI) Specification (Version 2.26.0)

## 4.1.9 Self-Match Prevention

The Self-Match Prevention (SMP) functionality provided by SIX Swiss Exchange for the SwissAtMid Order Book is also applicable to SwissAtMid Block Orders. SMP prevents orders submitted by the same Participant Identification (Party ID) and designated as “Principal” (trading in own name and for own account) from executing against each other. Such orders prevented from trading against each other due to the SMP restriction will remain in the SwissAtMid Order Book and are considered for a next matching cycle. Moreover, Firm-up Requests are not sent to participants where the potential match for the Indicative Block Order would trigger the SMP restriction.

### 4.1.10 Pre-Trade Transparency

All orders in the SwissAtMid trading service which are executed by reference price systems of the Exchange are exempted from pre-trade transparency regulations according to Art. 27 para. 4 let. a [FMIO](#).

In addition, for SwissAtMid Block Orders as well as for Normal Orders in SwissAtMid of block value, SIX Swiss Exchange will apply the pre-trade transparency waiver for orders that are large in scale compared with normal market size according to Art. 27 para. 4 let. d [FMIO](#).

 Please go to section 4.1.8 for detailed information about Minimum Block Order Value Threshold

 **Further Reading**

- Reference Data Interface (RDI) Specification (Version 2.26.0)
- [Directive 5: Alternative Trading](#) (will be updated for SMR10)

### 4.1.11 Post-Trade Transparency

SwissAtMid Block trades are deemed to be “On-Exchange” in accordance with Clause 10.1 [Trading Rules](#).

All trades executed in the SwissAtMid trading service are published immediately, independently of whether they are large-volume transactions (LIS) in accordance with Art. 28 para. 4 let. a [FMIO](#).

SwissAtMid Block trades are identified under the existing Market Identifier Code (MIC) for the SwissAtMid trading service:

MIC	Operating MIC	Name Description
XSWM	XSWX	SIX Swiss Exchange AG – SwissAtMid

SwissAtMid Block trades will be flagged with the following existing attributes in the market information:

Interface	Message	Flagging for SwissAtMid Block Trades
-----------	---------	--------------------------------------


IMI	Trade Message [P]	Book Type = M (SwissAtMid Order Book)
SIX MDDX	Trade [TR]	Market Mechanism = DB (Dark Order Book) Trading Mode = CT (Continuous Trading) Transaction Category = D (Dark Trade) Publication Mode = <empty> (Immediate Publication)

 **Important Note**

Since all trades in SwissAtMid are published immediately, SIX Swiss Exchange will not flag trades which are large-volume transactions (LIS) in the market data interfaces.

SIX Swiss Exchange has introduced the following new attributes in the Reference Data Interface (RDI) in order to facilitate identifying trades which are large-volume transactions (LIS) for securities enabled for SwissAtMid Block trading:

File/Object	Attribute	Type
TradedInstrument	postTradeLisThreshold	Integer-9
TradedInstrument	postTradeLisCurrency	Currency

 Please go to section 5.2 for a detailed technical description.

 **Further Reading**

- ITCH Market Data Interface (IMI) Specification (Version 1.7.2)
- SIX MDDX Interface Specification (Version 1.23.0)
- Reference Data Interface (RDI) Specification (Version 2.26.0)

## 4.1.12 SwissAtMid Block Order Report

SIX Swiss Exchange will provide a SwissAtMid Block Order Report to participants to provide a summary of a participant's large-in-scale trading activity in the SwissAtMid order book. This includes all trading activity which is at or above the Post-Trade LIS Threshold. The SwissAtMid Block Order Report will also provide statistics specifically on a member's SwissAtMid Block Order activity and Performance Scoring.

The SwissAtMid Block Order Report will be made available via the Member Section before start of trading on the following business day when the orders and executions have taken place in the SwissAtMid trading service (T+1).

The SwissAtMid Block Order Report will be provided by SIX Swiss Exchange free of charge.

The SwissAtMid Block Order Report for participants will be available via the Private Member Section from the start of SMR10 Production in PDF format under the following link:

- [https://secure.six-swiss-exchange.com/member\\_section/business\\_reports.html](https://secure.six-swiss-exchange.com/member_section/business_reports.html)

Participants interested in accessing the new SwissAtMid Block Order Report via the Member Section can configure access in the Member Section themselves. The respective Master User of the Member Section account can configure the access right to the report and grant access to his users.

The report will contain the following main information:

Statistics Type	Description
-----------------	-------------

SwissAtMid Block Order Market statistics	<ul style="list-style-type: none"> <li>- Covers market level SwissAtMid Block Order trading statistics</li> <li>- Includes market level statistics on LIS Turnover, trades and orders in SwissAtMid</li> </ul>
SwissAtMid Block Order Client statistics	<ul style="list-style-type: none"> <li>- Covers client level SwissAtMid Block Order trading statistics</li> <li>- Includes client level statistics on LIS order and trade activity in the SwissAtMid</li> <li>- Provides a comparison to the market (i.e. a client's market share, rank, etc)</li> </ul>
SwissAtMid Block Order Liquidity Interactions	<ul style="list-style-type: none"> <li>- Liquidity Interaction statistics to show a client's order level activity and counterparty interactions</li> <li>- Includes client level statistics on Firm-ups, Match Breaks and Overall Performance in trading via the SwissAtMid Block solution</li> </ul>

Further details and mock-ups of the SwissAtMid Block Report will be published in a future version of this Release Guide.

### 4.1.13 Post-Trade Processing

SwissAtMid Block trades are cleared and settled via a Central Counterparty according to Clause 17 [Trading Rules](#).

The standard settlement cycle is T+2 trading days.

The identity of the counterparty is not disclosed to the participants involved in the SwissAtMid Block trades.

SIX Swiss Exchange processes SwissAtMid Block trades according to the same Clearing Rules and Clearing Settlement Standing Instructions (CSSI) set up for the trades executed in the SwissAtMid Order Book.



Please go to section 5.2 for a detailed technical description.



#### Further Reading

- Standard Trading Interface (STI) Specification - Confirmations (Version 2.27.0)
- Participant Trade Reconciliation Report Specification (Version 1.43.0)

### 4.1.14 Corrections, Cancellations and Countertrades

#### 4.1.14.1 Corrections

Participants can correct the trading capacity of SwissAtMid Block trades via the Standard Trading Interface (STI) as well as via the Reporting Application (GUI). Since SwissAtMid Block trades in the indicated segments are cleared by a central counterparty, the correction must be completed on the same business day as the original trade before the end of the Clearing Day (18:15 CET).

#### 4.1.14.2 Cancellations

Since SwissAtMid Block trades in the indicated trading segments are cleared by a central counterparty, cancellations have to be performed on the same business day as the original trade before the end of the Clearing Day (18:15 CET); as a consequence, cancellation requests must be submitted to the Exchange no later than by End of Trading (17:45 CET).

You may find further details regarding the procedure, effect and costs of Cancellations in Clause 22 of [Directive 3: Trading](#).

#### 4.1.14.3 Countertrades

Participants may report Countertrades of SwissAtMid Block trades themselves or request Countertrades with SIX Swiss Exchange.

## 4.1.15 Market Control

Market Control at SIX Swiss Exchange actively monitors the integrity of trading in the SwissAtMid trading service and ensures efficient, fair and orderly trading in line with the rules of the Exchange.

SIX Swiss Exchange will apply the same Mistrade procedure for SwissAtMid Block trades executed in the Mid-Point Order Book as for any other SwissAtMid trades.

In the event of special situations according to Clause 10.10 [Trading Rules](#) – whether on the participant’s or the Exchange’s side – participants may request the emergency deletion of their open orders. Note that SIX Swiss Exchange supports the emergency deletion of orders based on the type of order book.

In addition, SIX Swiss Exchange supports the emergency deletion of SwissAtMid Block Orders based on the type of order condition: Indicative, Firmed-up or Binding. When requesting an emergency deletion, participants may choose whether they want to request the deletion of all open orders, only orders in MPOB or only Block orders with a certain Order Condition. If not stated otherwise by the participant, SIX Swiss Exchange will delete all open orders of a participant in all books by default.



### Further Reading

[Directive 4: Market Control](#)

## 4.1.16 Sponsored Access

Sponsored Users can also submit SwissAtMid Block Orders via the OUCH Trading Interface (OTI).

The [Sponsored Access – Risk Management Controls \(RMC\)](#) will be applicable for SwissAtMid Block Orders and Trades.

The [Sponsored Access RX GUI User Guide](#) used by Sponsoring Participants to manage their respective Sponsored Users will include SwissAtMid Block Orders:

Sponsoring Participants will be able to identify the SwissAtMid Block trades of their Sponsored Users via the amended Sponsored Access - FIX Drop Copy Interface. The RiskXposure Graphical User Interface (GUI) does not reflect the trading period when a trade has occurred.

The Sponsored Access – FIX Drop Copy Interface has been amended to reflect the SwissAtMid Block Order related changes:

Interface	Message	Flagging
FDC	Execution Report (MsgType=8)	Book Type = 4 (Dark order book) BookSubType = SWM (SwissAtMid) Routing Instruction = SWML =SwissAtMid Block Order COrderLinkID (required by Firmed-up Block orders used to reference the Indicative Block Order) Order Condition = Indicative, Binding, Firmed Up ManualOrderIndicator = N, Y ExecType = L (Triggered) - indicates a firm-up request for an Indicative Block Order ReputationalScore (Score value of participant regarding firm-up performance of Indicative Block Orders)



Please go to section 5.2.7 for a detailed technical description.





#### Further Reading

- Sponsored Access FIX Drop Copy Interface Specification (Version 1.39.1)
- [Sponsored Access RX GUI User Guide](#)

### 4.1.17 Fees and Costs

No additional trading or usage fees are charged for SwissAtMid Block Orders. For trades resulting from SwissAtMid Block Orders, SIX Swiss Exchange charges the same fees as for other trades executed in SwissAtMid.

The trading fees are defined per service offering and trading segment. The applicable tariffs may be found in the respective Annex of the List of Charges under the Trading Rules:

Trading Service	Trading Segment	Reference to List of Charges under the Trading Rules
SwissAtMid	Blue Chip Shares	Annex L – Clause 1
	Mid-/Small-Cap Shares	Annex L – Clause 2

Please note that trades resulting from SwissAtMid Block Orders in the Trading Segment Blue Chip Shares count towards the Tariff Commitment Level chosen by the participant according to clause 7.4.3 [List of Trading Charges](#).

Trades resulting from SwissAtMid Block Orders will not count towards the fulfilment of the requirements for the Liquidity Provider Scheme (LPS) for Blue Chip Shares according to clause 7.4.3 [List of Trading Charges](#) nor towards the Fee Promotion "[Limited-time trading free promotion for Blue Chips Shares](#)".



#### Further Reading

- [List of Charges under the Trading Rules](#)

#### 4.1.17.1 Billing Report

Please note that the Billing Report File Interface (BRI) has been adapted to also include trades resulting from SwissAtMid Block Orders and thus enable participants to relate the trading fees to the transaction details in the Billing Report on the [Member Section](#) of SIX Swiss Exchange.

The changes to the Billing Report File Interface might require adjustments to the participant own applications. The new Billing Reports will be available from the go-live of SMR10 in the Production environment and cannot be tested prior to Production launch in the Membertest environment.



#### Further Reading

- Billing Report File (BRI) Interface Specification (Version 1.33.0)

## 4.2 Trading and Alternative Trading

### 4.2.1 Different Pre-Trade Control Values per Trading Service

Currently SIX Swiss Exchange applies the same pre-trade control parameters for orders routed to the Central Limit Order Book (CLOB) as well as to the trading services "SwissAtMid" and "Swiss EBBO".

With SMR10, SIX Swiss Exchange will support different values for the following order pre-trade controls for the Central Limit Order Book (CLOB) as well as for the trading services "SwissAtMid" and "Swiss EBBO":

- Price Collar
- Maximum Order Value
- Maximum Order Volume

If the pre-trade control parameters are configured differently for the CLOB, SwissAtMid and/or Swiss EBBO the following orders will be validated against the **greater pre-trade control value of each book** they are potentially exposed to:

- Normal Orders with Routing Instruction "SWMX" (Sweep Orders)
- Normal Orders with Routing Instruction "SWMB" (Plus Orders)
- Normal Orders with Routing Instruction "SEB" (Swiss EBBO Orders)

 **Important Note**

Please note that for the Quote on Demand trading service, SIX Swiss Exchange already supports different pre-trade control parameters compared to the Quote Driven Market since SMR9.

The Maximum Order Value is defined in Swiss Francs. For securities with a different trading currency than Swiss Francs, the Maximum Order Value is converted using the daily maintained exchange rate of the Exchange. For each book the Reference Price used for the calculation of the pre-trade controls is the Reference Price of the previous business day in the Central Limit Order Book.

Please find the applicable pre-trade control values in the respective Annex of the ["Trading Parameters" Guideline](#).

SIX Swiss Exchange has made the following changes to the Reference Data Interface (RDI) in order to reflect the different pre-trade control values per book:

File/Object	Change	Attribute
TradingSegment	Deletion	priceCollarFactor
	Deletion	maxOrderValue
	Deletion	qodPriceCollarFactor
	Deletion	qodMaxOrderValue
	Deletion	qodOrderDeviationLimit
PreTradeControl (new)	New	tradingSegmentId
	New	bookType
	New	priceCollarFactor
	New	maxOrderValue
	New	orderDeviationLimit

 **Further Reading**

- Reference Data Interface (RDI) Specification (Version 2.26.0)
- ["Trading Parameters" Guideline](#) (will be updated for SMR10)

 Please go to section 5.3.1 for a detailed technical description.

## 4.2.2 Enhancements to the “Quote on Demand” Trading Service

SIX Swiss Exchange will introduce further enhancements to the Quote on Demand trading service launched with SWXess Maintenance Release 9 in December 2020:

- Participants will be able to submit QOD Quote Requests in the Quote on Demand trading service via the OUCH Trading Interface (OTI).
- Liquidity Providers will be able to submit QOD Quotes in the Quote on Demand trading service via the OUCH Trading Interface (OTI).
- Quote on Demand trades which are large-volume transactions (LIS) in accordance with Art. 28 para. 4 let. a [FMIO](#) will be published with a delay.
- Participants will be able to override the default Auto-Execute duration value used for QOD Auctions by choosing a new configurable custom duration value. Participants will also benefit from a shorter random time interval which will apply to all QOD Auction trading modes.
- Participants will be able to continue using the existing functionality of the QOD UI however it will now be accessed only via the new SIX Trading User Interface.

The release of the above enhancements into the Membertest and Production environments is described in section 3.

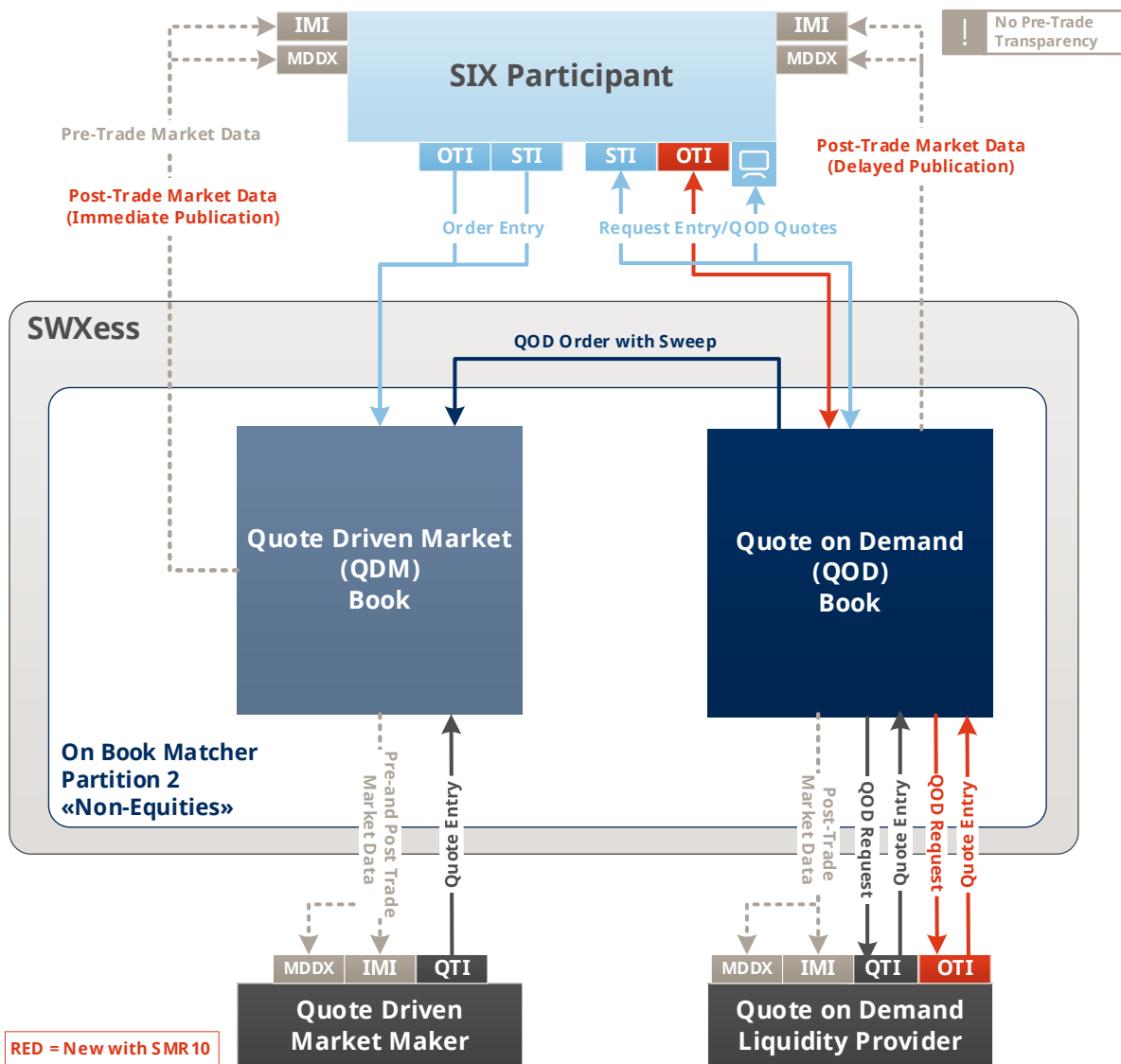


Figure 2 Overview Quote on Demand Trading Service

**Quote on Demand Supported for:**

Trading Interfaces	<ul style="list-style-type: none"> <li>- Standard Trading Interface (STI) for QOD Requests</li> <li>- SIX Trading User Interface for QOD Requests</li> <li>- Quote Trading Interface (QTI) for QOD Quotes</li> <li>- OUCH Trading Interface (OTI) for QOD Requests and QOD Quotes (new)</li> </ul>
Market Data Interfaces	<ul style="list-style-type: none"> <li>- SIX Multi-Dimensional Data FluX Interface (SIX MDDX)</li> <li>- ITCH Market Data Interface (IMI)</li> </ul>
On Book Matcher	<ul style="list-style-type: none"> <li>- On Book Matcher Partition 2 "non-equities"</li> </ul>
Trading Segments	<ul style="list-style-type: none"> <li>- Exchanged Traded Funds (584 and 585)</li> <li>- Exchange Traded Products (588)</li> </ul>
Trading Period	<ul style="list-style-type: none"> <li>- Continuous Trading</li> </ul>
Trading Mode	<ul style="list-style-type: none"> <li>- Discretion only</li> <li>- Auto-Execute or Cancel</li> <li>- Auto-Execute and optional Discretion</li> </ul>
Order Types	<ul style="list-style-type: none"> <li>- QOD Request (STI, SIX Trading User Interface <b>and OTI</b>)</li> <li>- QOD Quote (QTI <b>and OTI</b>)</li> </ul>
Trade Publication	<ul style="list-style-type: none"> <li>- Delayed Publication if transaction is large-volume transaction (new)</li> </ul>



Please go to section 5.3.2 for a detailed technical description.



**Further Reading**

- [SMR9 – Readiness Guide](#)
- [SMR9.1 – Readiness Guide](#)
- [Directive 5: Alternative Trading](#)

**4.2.2.1 Extension of QOD Requests to OUCH Trading Interface (OTI)**

With SMR10, participants of SIX Swiss Exchange will be able to enter QOD Requests to the Quote on Demand book via the OUCH Trading Interface (OTI) in addition to the currently supported Standard Trading Interface (STI) and the SIX Trading User Interface.

Participants using the OUCH Trading Interface (OTI) will have the same functionality for entering and maintaining QOD Requests as provided via STI. However, unlike with STI, participants using OTI for order entry do not have the possibility of simultaneously maintaining their orders via the SIX Trading User Interface.

OTI for QOD Request entry supports the following:

Attribute	QOD Request
Routing Instruction (Order Placement)	<ul style="list-style-type: none"> <li>- QODN – QOD Request non Sweep</li> <li>- QODS – QOD Request with Sweep</li> </ul>
Order Type	QOD Requests
Side	<ul style="list-style-type: none"> <li>- Buy</li> <li>- Sell</li> </ul>
Price Type	<ul style="list-style-type: none"> <li>- Market</li> </ul>
The same price type is used for both books.	<ul style="list-style-type: none"> <li>- Limit</li> </ul>

	Only price type and price can be amended for QOD Requests.
Price The same price is used for both books. Price must be on a valid price step for the respective security.	Price is defined per unit of quantity Only price type and price can be amended for QOD Requests.
Quantity	Total number of units. Full quantity entered by participant of QOD Request must always be executed in QOD and/or QDM.
Secondary Quantity	not supported
Validity The same validity is used for both books.	Good for Auction No other validity is supported for QOD. QOD Requests with unsupported validities are rejected.
Trading Capacity	<ul style="list-style-type: none"> <li>- Riskless Principal</li> <li>- Principal</li> </ul>
Trading Mode	<ul style="list-style-type: none"> <li>- Discretion Only</li> <li>- Auto-Execute or Cancel</li> <li>- Auto-Execute And Optional Discretion</li> </ul> <p>The Trading Mode of a QOD Request cannot be modified when the QOD Call Phase is running.</p>
Disclosure Mode	By default, the Party ID of the participant submitting the QOD Request is disclosed to the Liquidity Providers. This cannot be changed.
Target Liquidity Providers	<ul style="list-style-type: none"> <li>- QOD Request submitted by a participant is sent to all Liquidity Providers by default.</li> <li>- QOD Request submitted by a participant is sent to a defined list of maximum 5 Liquidity Providers.</li> </ul>
Minimum Number of Responders	<p>This attribute defines how many quotes must be received for the QOD Request to Auto-Execute (at least one must be in-limit).</p> <p>SIX Swiss Exchange configures 1 responders by default (from 1 January 2022 the default changes to 3).</p> <p>The participant submitting the QOD Request can overwrite the default set by SIX Swiss Exchange.</p>
Auction ID	<p>This attribute uniquely identifies a QOD Call Phase.</p> <p>Multiple simultaneous QOD Call Phases per security and participant are supported.</p>
Pre-Trade Transparency	<p>No</p> <p>Participants see all Quote replies from Liquidity Providers to their submitted QOD Request during the QOD Call Phase.</p>
Persistency	QOD Requests <b>are not persisted</b> in the event of an intraday recovery.

For submitting and maintaining QOD Requests for the Quote on Demand trading service via the OUCH Trading Interface (OTI), SIX Swiss Exchange will introduce a set of new messages in the SWXess trading interface.



Please go to section 5.3.2.1 for a detailed technical description.



#### Further Reading

- OUCH Trading Interface (OTI) Specification (Version 1.6.0)
- [SMR9 – Readiness Guide](#)
- [Directive 5: Alternative Trading](#)

#### 4.2.2.2 Extension of QOD Quotes to OUCH Trading Interface (OTI)

With SMR10, registered Liquidity Providers for Quote on Demand will be able to enter QOD Quotes to the Quote on Demand book via the OUCH Trading Interface (OTI) in addition to the currently supported Quote Trading Interface (QTI).

Participants using the OUCH Trading Interface (OTI) will have the same functionality for entering and maintaining QOD Quotes as provided via QTI. OTI for QOD Quotes entry supports the following:

Attribute	QOD Quote
Routing Instruction (Order Placement)	Not applicable The Routing Instruction of the QOD Request is disclosed to the Liquidity Provider.
Order Type	Orders
Side	Buy AND Sell The buy and sell side of a quote have to be entered as two separate QOD LP orders.
Price Type	Limit
Price	Price is defined per unit of quantity.
Quantity	Total number of units. The Quantity of the Quotes of the Liquidity Providers must be equal to the quantity requested by the participant in the QOD Request. Quotes can be partially executed in QOD. The Quantity of the QOD Request is disclosed to the Liquidity Provider.
Secondary Quantity	Not supported
Validity	Good for Day
Trading Capacity	Principal
Trading Mode	Not applicable
Disclosure Mode	Not applicable The Party ID of the participant submitting the QOD Request is disclosed to the Liquidity Providers.
Target Liquidity Providers	Not applicable
Minimum Number of Responders (new attribute)	Not applicable
Auction ID	This attribute uniquely identifies a QOD Call Phase and must be provided by Liquidity Providers on the Quote.
Pre-Trade Transparency	No
Persistency	Quotes <b>are not persistent</b> in the event of an intraday recovery.

Liquidity Providers for Quote on Demand require a new dedicated **OUCH Trading Interface (OTI) user** for submitting Quotes to the new Quote on Demand book. All QOD Liquidity Providers will be configured to receive all QOD Requests from all participants and will also be authorized to submit quotes in all securities eligible for Quote on Demand by default.

Each participant acting as Liquidity Provider for QOD will receive **200 Orders per Second of the Shared Capacity pool** for Quote on Demand by default free of charge if the Liquidity Provider fulfils the obligations according to Annex N - Clause 2 [List of Trading Charges](#). SIX Swiss Exchange has limited the amount of Shared Capacity for QOD

per Liquidity Provider to 200 Orders per Second. The QOD Shared Capacity can only be used for the Quote on Demand trading service and not for Market Making in the Quote Driven Market.

If a Liquidity Provider User exceeds his configured Shared Capacity or the entire pool of Shared Capacity for QOD is exceeded, the participant will receive the Reply Code "F" (Flow control is active) in the Cancelled Message [C] and Rejected Order Message [J]

For submitting and maintaining QOD Quotes for the Quote on Demand trading service via the OUCH Trading Interface (OTI), SIX Swiss Exchange will introduce a set of new messages in the SWXess trading interface.



Please go to section 5.3.2.1 for a detailed technical description.



#### Further Reading

- [SMR9 – Readiness Guide](#)
- OUCH Trading Interface (OTI) Specification (Version 1.6.0)
- [Directive 5: Alternative Trading](#)
- [List of Charges under the Trading Rules](#)

### 4.2.2.3 Delayed Publication for QOD Trades

SIX Swiss Exchange will introduce delayed publication of Quote on Demand trades which are large in scale transactions (LIS) in accordance with Art. 28 para. 4 let. a [FMIO](#).

If the turnover of the Quote on Demand trade meets the criteria, SIX Swiss Exchange will automatically delay the publication of the trade according to the following table:

QOD Trade Turnover CHF	QOD Trade Publication
Smaller than 10 million	Immediate Publication
Between 10 million and 50 million	Delayed Publication – 60 Minutes after the trade
Greater than 50 million	Delayed Publication – End of Trading

If a QOD Request with sweep executes in both books (QDM and QOD), only the partial execution in the Quote on Demand book will be published with a delay if the criteria are met; the partial execution in the Quote Driven Market (QDM) will be published immediately, independently from the turnover. The turnover of the (partial) execution in Quote on Demand is relevant to determine if the QOD trade publication shall be delayed; the original turnover of the QOD Request with Sweep is irrelevant.

The QOD Trade Turnover is defined in Swiss Francs. For securities with a different trading currency than Swiss Francs, the QOD Trade Turnover is converted using the daily maintained exchange rate of the Exchange. The parameters for the QOD Delayed Publication are not included in the Reference Data Interface (RDI).

If a QOD trade subject to delayed publication is canceled before its publication, the publication of the original trade as well as the cancellation will be suppressed. If the publication of a QOD trade subject to 60 minutes delayed publication would be after end of trading, then the trade is published at end of trading at the last instead of delaying by 60 minutes.

Participants will receive the Execution Reports via STI, OTI and QTI for QOD trades subject to delayed publication immediately after execution and not at the publication time.

QOD trades subject to delayed publication will be published at the publication time and not at the execution time via the market data interfaces.

Interface	Message	Flagging for QOD Trades (Subject to Delayed Publication)
IMI	Trade Message [P]	Execution Time (new attribute) In case of delayed trade publication, the nanoseconds since epoch (UTC). Value 0 in case of immediate trade publication.  Match Number <b>Due to cases of delayed trade publication the numbers are not guaranteed to be contiguous or incrementing.</b>
SIX MDDX	Trade [TR]	ExecutionTime = Time at which the trade took place PublishTime = Time at which the trade is published (may differ from execution time in case of delayed publication) Publication Mode = 2 / LRGS

#### 4.2.2.4 Override Auto-Execute Duration with a Custom Value

The Quote on Demand trading service supports three different Trading Modes which determine the duration of QOD Auctions. Currently the maximum duration of the Auto-execute part of a QOD Auction in Trading Modes “Auto-execute or Cancel” and “Auto-execute and Optional Discretion” is set to 950 milliseconds by default by the Exchange, followed by a maximum of 50 milliseconds “Random Matching Time”.

New with SMR10, participants will have the possibility to override the default value for Auto-Execution and define a custom maximum duration for the Auto-execute part of QOD Auctions from a value between 1-99999 milliseconds. This override functionality is configurable at a participant level (PartyID). Please note that the “Random Matching Time” cannot be defined by the participant and is set by default by the Exchange. Please find the changes highlighted in bold in the table below.

As part of this change, the default values for the Auto-execute time interval will change and the “Random Matching Time” will change to a lower value.

Trading Mode	Current SMR9.1	NEW with SMR10
Discretionary	5 minutes	5 minutes
Auto-execute or Cancel	Default: 950 milliseconds plus a maximum of 50 milliseconds “Random Matching Time”	<b>Default: 990 milliseconds</b> <b>Plus a maximum of 10 milliseconds</b> <b>“Random Matching Time”</b> <b>OR</b> <b>Custom duration between 1 - 99999</b> <b>milliseconds</b> <b>plus a maximum of 10 milliseconds</b> <b>“Random Matching Time”</b>
Auto-execute and Optional Discretion	Default: 950 milliseconds plus a maximum of 50 milliseconds “Random Matching Time”  If no trade can be executed, the duration is extended by an additional 5 minutes.	<b>Default: 990 milliseconds</b> <b>Plus a maximum of 10 milliseconds</b> <b>“Random Matching Time”</b>  If no trade can be executed, the duration is extended by an additional 5 minutes. <b>OR</b> <b>Custom duration between 1 - 99999</b> <b>milliseconds</b> <b>plus a maximum of 10 milliseconds</b> <b>“Random Matching Time”</b>  If no trade can be executed, the duration is extended by an additional 5 minutes.





If you are interested in specifying a custom value for the Auto-execute duration used in QOD Auctions, please submit a completed and signed [PartyID and SenderCompID Configuration Form](#) to Member Services ([member.services@six-group.com](mailto:member.services@six-group.com) / +41 58 399 2473).

#### 4.2.2.5 Integration of QOD UI within the SIX Trading User Interface

With SMR10, SIX Swiss Exchange will introduce a new SIX Trading User Interface which will integrate the previous Quote On Demand User Interface (QOD UI) within it. Users with access to the QOD UI will automatically have access to the new SIX Trading User Interface. The links to access this new SIX Trading User Interface will have been published in the **SIX Trading User Interface - User Manual**.

Please see section 5.6.5 for further details.



#### Further Reading

SIX Trading User Interface - User Manual (Version 1.10)

#### 4.2.3 Stop Trading after Non-Opening in the QDM and PVM

SIX Swiss Exchange will introduce a Stop Trading No Quote interruption after a Non-Opening condition in the Quote Driven Market and Price Validation Market.

The price of an auction (for example Opening Auction, end of a Trading Interruption, Closing Auction) is determined according to the principle of highest executable volume where all limited and unlimited (market) orders and quotes in the order book are considered. If all unlimited orders cannot be executed in an auction, no executions will take place and the order book remains closed (Non-Opening). During the Non-Opening condition order and quote maintenance is supported.

Currently, if the order book is in a Non-Opening condition and an order is entered into the order book which resolves the market order imbalance so that all unlimited orders can be executed in the auction but no quote is in the order book, the execution(s) takes place immediately according to the principle of highest executable volume and the **“Stop Trading No Quote”** trading interruption is **not triggered**.

With SMR10, SIX Swiss Exchange changes the behavior in the Quote Driven Market and Price Validation Market. If the order book is in a Non-Opening condition and an order is entered into the order book which resolves the market order imbalance so that all unlimited orders can be executed in the auction and no quote is in the order book, the **“Stop Trading No Quote”** trading interruption is **triggered** before the possible execution(s) takes place.

This change is transparent in the SWXess trading and market data interfaces.

Examples of matching scenarios showing the changed behavior are included in the Appendix D of this document.



#### Important Note

The behavior to resolve a Non-Opening state in the Central Limit Order Book will not change.



#### Further Reading

- [Directive 3: Trading](#) (will be updated for SMR10)
- [“Trading Parameters” Guideline](#) (will be updated for SMR10)

## 4.2.4 Change of Enumerators for Trade Flag “LastLiquidityInd”

SIX Swiss Exchange will align the enumerator for “Auction” in LastLiquidityInd (FIX Tag 851) to the FIX Standard as follows:

Interface	Current Value	New Value
STI – Confirmations	Possible values: 1 = Added Liquidity (the Buyer/Seller was the poster in the book)	Possible values: 1 = Added Liquidity (the Buyer/Seller was the poster in the book)
Participant Trade Reconciliation Report (TRR)	2 = Removed Liquidity (the Buyer/Seller was the Aggressor) 3 = Auction	2 = Removed Liquidity (the Buyer/Seller was the Aggressor) 4 = Auction



### Further Reading

- Standard Trading Interface (STI) Specification - Confirmations (Version 2.27.0)
- Participant Trade Reconciliation Report Specification (Version 1.43.0)

## 4.2.5 New “Minimum Execution Quantity” field in OUCH Trading Interface (OTI)

- SIX Swiss Exchange will introduce a new field “Minimum Execution Quantity” (MEQ) in OTI applicable to the following orders:
  - SwissAtMid Normal orders
  - SwissAtMid Block Orders
  - Limit Plus orders
  - Iceberg Plus orders
- This field describes the minimum acceptable quantity to execute per trade in the SwissAtMid Order Book and replaces the “Secondary Quantity” field previously used for this purpose.
- This change also aligns the use of the “Secondary Quantity” for Iceberg Plus and other Iceberg orders for definition of visible quantity. For Iceberg Plus orders, the field “Secondary Quantity” will newly only describe the “Visible Quantity” for the Central Limit Order Book (CLOB).



Please go to section 5.3.4 for a detailed technical description.



### Further Reading

OUCH Trading Interface (OTI) Specification (Version 1.6.0)

## 4.3 Trade and Transaction Reporting

### 4.3.1 Cancellations of Off Order Book and Off Exchange Trades by Participants

According to the trading rules of SIX Swiss Exchange, irregular trades and incorrect trade reports must be canceled. The parties involved in the trade must contact the Exchange to have the trade canceled.

With SMR10, SIX Swiss Exchange introduces the functionality for participants and Reporting Members to cancel the following trades themselves via the Standard Trading Interface (STI) or the web-based Reporting Application:

- one- and two-sided Trade Reports to the Exchange (On Exchange – Off Book)
- one- and two-sided Trade Reports to the Reporting Office (Off Exchange)
- Delivery Reports

If participants do not wish to implement the functionality to cancel off book trades themselves, SIX Swiss Exchange continues to offer cancellations on behalf of the participant with the current procedures.



#### Important Note

The cancellation of on-exchange trades conducted via an order book according to Clause 10.1 para. 2 [Trading Rules](#) cannot be done by the participants themselves and must still be requested with the Exchange with the current procedures and within the current periods.

For the cancellation of two-sided Trade Reports and Delivery Reports the consent of both parties is required. If a counterparty agreed to the match of the two-sided Trade Report/Delivery Report but not to its cancellation, the Trade Report/Delivery Report remains valid. Note that it is still possible for a party to cancel an unmatched two-sided Trade Report/Delivery Report. The cancellation of a two-sided Trade Report/Delivery Report must be agreed between the parties either by STI or Reporting Application or by the Exchange; it is not supported that one side of the Trade Report is canceled by the participant and the contra side is canceled by the Exchange.

Participants and Reporting Members cannot perform cancellations of countertrades of already previously canceled trades.

Trade cancellations of Trade Reports and Delivery Reports by participants and Reporting Members can be made no later than the trading day following that on which the trade was reported (T+1). Trade Reports in CCP-eligible securities must be canceled by the end of the clearing day (18:15 CET) on the same day on which the trade was reported (T).

If a Trade Report is subject to delayed publication and the trade has been canceled by the involved participants before its publication, SIX Swiss Exchange will suppress the publication of the trade and its cancellation.

SIX Swiss Exchange will publish the cancellations executed by the participants in the market data and flag them with Trade Condition "Participant Cancellation".

SIX Swiss Exchange will charge a fee of 50 CHF per trade cancellation performed by participants. For trade cancellations of off book trades performed by participants themselves the cancellation fees will be split between the involved parties by default.

It remains possible for participants to request cancellations to be performed on their behalf by SIX Swiss Exchange via the [Cancellation Form](#) or via STI. The fee charged per trade cancellation on behalf of participants is changed to 150 CHF per trade. Participants wishing a cancellation to be performed on their behalf should indicate which party should be charged or whether the fee should be split between the parties involved.



Please go to section 5.4.1 for a detailed technical description.



#### Further Reading

- Standard Trading Interface (STI) Specification - Trade Reporting (Version 4.20.0)
- Participant Trade Reconciliation Report Specification (Version 1.43.0)
- SIX MDDX Interface Specification (Version 1.23.0)
- [Reporting Application Manual](#) (will be updated for SMR10)

### 4.3.2 New Trade Type "DerivativeHedge" for Trade Reports

According to the trading rules of SIX Swiss Exchange, trades executed off order book during continuous trading must be reported immediately, but no later than **1 minute after the trade**.

On request of participants, SIX Swiss Exchange harmonizes the reporting deadline for Trade Reports in equities which are related to a delta-neutral derivative hedge. Trade Reports in equities which are related to a delta-neutral derivative hedge must be reported **within 5 minutes after the trade**. Trade Reports related to a delta-neutral

derivative hedge which are reported under the extended reporting deadline of 5 minutes must be flagged with the new trade type "DerivativeHedge".

Interface	Attribute	Format and Validation
STI – Trade Reporting	DerivativeHedge (FIX Tag 27100)	Boolean
Reporting Application		No validations or restrictions apply



### Important Note

The new attribute "DerivativeHedge" will not be included in the STI – Confirmation message nor in the Participant Trade Reconciliation Report (TRR).



Please go to section 5.4.2 for a detailed technical description.



### Further Reading

- Standard Trading Interface (STI) Specification - Trade Reporting (Version 4.20.0)
- [Reporting Application Manual](#) (will be updated for SMR10)
- [Reporting Office Rules](#) (will be updated for SMR10)
- [Directive 3: Trading](#) (will be updated for SMR10)
- [Trading Parameters Guideline](#) (will be updated for SMR10)

## 4.4 Market and Reference Data

Please refer to sections 4.1, 4.2 and 4.3 of this document for details in relation to the mandatory changes in both market data interfaces (IMI and SIX MDDX) as well as the Reference Data Interface (RDI).

## 4.5 Billing

### 4.5.1 SCAP Bandwidth Offering Expanded beyond 100Mbps

With the Production launch of SMR10, the SCAP network will expand its bandwidth offering to **include two additional options** of 200Mbps and 500Mbps.

The applicable monthly access tariffs for these new options may be found in Annex O of the [List of Trading Charges](#) and are shown here below.

Connectivity Option	Bandwidth Option	Access Fee Per Month (CHF)
Managed IP service	up to 200 Mbps	3'500
Managed IP service	up to 500 Mbps	4'500
Ethernet Service	up to 200 Mbps	3'500
Ethernet Service	up to 500 Mbps	4'500
Optical Link	up to 200 Mbps	5'700*
Optical Link	up to 500 Mbps	7'000*
Proximity service	up to 200 Mbps	4'100
Proximity service	up to 500 Mbps	5'100

Access Point Abroad	up to 200 Mbps	4'300
Access Point Abroad	up to 500 Mbps	5'300

\*plus one-off, expenditure-dependent internal installation costs incurred by the Exchange, e.g. for technical connection, routing, configuration, etc.

There is no change in the bandwidth requirements for participants with the introduction of SMR10 and full details on these requirements can be found in Section 19 of the [SWXess Platform Connectivity Guide](#).

Clients wishing to upgrade their existing connectivity to the new bandwidth options should contact their Local Support Center. The forms required to request a bandwidth upgrade for the various connectivity options will be published in the [Connectivity Forms](#) section of the SIX Swiss Exchange website.



#### Important Note

It will not be possible to order or upgrade the bandwidth before the SMR10 Production start date of 06.12.2021.

## 4.6 Other Services

### 4.6.1 Sponsored Access (SA)

#### 4.6.1.1 SwissAtMid Block Order Type

All changes in the Sponsored Access offering related to the new SwissAtMid Block Order type are described in section 4.1.16 of this document.

#### 4.6.1.2 Changes to the Sponsored Access FIX Drop Copy Interface (SA FDC)

SIX Swiss Exchange will harmonize the following attributes and values in the Sponsored Access FIX Drop Copy Interface to be in line with the Standard Trading Interface (STI):

Attribute	Current Value(s)	New Value(s)
BookType (FIX Tag 26561)	Service category of the trade's execution (only applicable to trades): 0 = Book 4 = Dark order book 7 = Hybrid	Service category of the trade's execution (only applicable to trades): 4 = Dark order book 7 = Hybrid 8 = Central Limit Order Book (new)
Symbol (FIX Tag 55)	Always "[N/A]"	Not provided anymore
OrdType (FIX Tag 40)	Not present	2 = Limit
OrderCondition (FIX Tag 27001)	Not present	1 = Indicative 2 = Binding 3 = Firmed-up
ManualOrderIndicator (FIX Tag 1028)	Not present	N = automated Y = manual



#### Further Reading

Sponsored Access FIX Drop Copy Interface Specification (Version 1.39.1)

## **4.6.2 Bilateral Trading Platform for Structured Products (XBTR)**

There are no functional changes for the Bilateral Trading Platform for Structured Products operated by SIX Swiss Exchange with SMR10.

## 5 Technical Changes



Technical Audience

### 5.1 Overview SMR10 Interface Changes

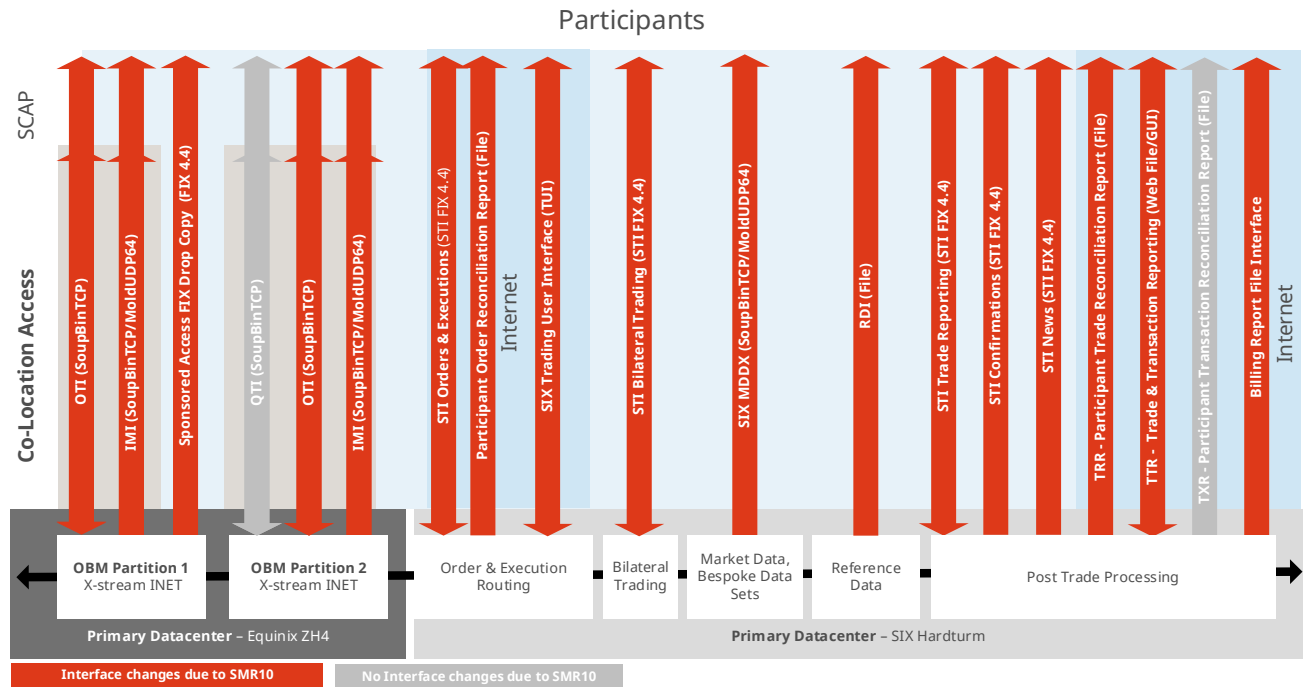


Figure 3: Overview SMR10 interfaces

### 5.2 SwissAtMid Block Orders

SwissAtMid Block Order is a service of SIX Exchange Services that provides enhanced Large-In-Scale (LIS) order management in SwissAtMid (MPOB).

The service adds the following to SwissAtMid:

- Binding Block Orders
- Indicative Block Orders
- Firmed-up Block Orders



Please go to section 4.1 for a detailed business description.

## 5.2.1 Technical Impact on OUCH Trading Interface (OTI)

The following table highlights all impacted messages and fields:

Message Type	Impacted Fields	Impact
Enter Order Message [O]	Order Link Token	New field
	Time in Force	Please note that for Firmed-up Block Orders which are usually entered based on a Firm-up Request Message [F], "immediate" has the effect that the order remains alive until the related Firm-up Phase ends. Only then does the order expire if it cannot execute.
	Secondary Quantity	Check the Notes regarding Order Placement of "L" SwissAtMid Block order in the specifications document.  MinExQuantity can still be specified in this field for backwards compatibility reasons however new field "Minimum Execution Quantity" should be used instead.
	Minimum Execution Quantity	New field  A value > 0 overrides a MinExQuantity set in Secondary Quantity field. Ignored for Order Placement = "C" and "E" (recommended to use value 0).
	Order Placement	New enumerator: "L" SwissAtMid Block order
	Order Condition	New field

If an Indicative Block Order is matched at order entry, a Firm-up Request message is sent instead of an Accepted message.

Message Type	Impacted Fields	Impact
Replaced Order Message [U]	Time in Force	Check the Notes values supported for Block Orders in the specifications document.  Please note that for Firmed-up Block Orders which are usually entered based on a Firm-up Request Message [F], "immediate" has the effect that the order remains alive until the related firm-up phase ends. Only then does the order expire if it cannot execute.
	Minimum Execution Quantity	New field

- In case an Indicative Block Order is matched when replaced, a Firm-up Request message is sent instead of a Replaced message.
- The Replace Order message cannot change the original values for:
  - Order Link Token
  - Order Condition
- Firmed-up Block Orders of all validities (including a Time in Force of immediate) can also be replaced while they are waiting for counter party firm-up during a firm-up phase.



Message Type	Impacted Fields	Impact
Accepted Message [A]	Order Link Token	New field
	Minimum Execution Quantity	New field
	Order Placement	New enumerator: "L" SwissAtMid Block order
	Order Condition	New field
	Order State	Check the Notes regarding the Exception for Firmed-up Block Orders in the specifications document.
Replaced Message [U]	Minimum Execution Quantity	New field
	Order State	Check the Notes regarding the Exception for Firmed-up Block Orders in the specifications document.
Rejected Order Message [J]	Reason	New values: "I" and "D" for participants who are blocked from sending SwissAtMid Block Orders
Firm-up Request Message [F]	all	New message

The Firm-up Request Message [F] indicates a trading opportunity for the referenced Indicative Block Order and the start of a firm-up phase. At the same time this message indicates that the Indicative Block Order is canceled. There is no separate message sent about the cancellation. The content of the Firm-up Request message contains the values as entered for the Indicative Block Order and a score value about the firm-up performance of the participant.

If the score falls below a certain limit defined in SIX regulations, SIX Swiss Exchange will exclude the participant from the SwissAtMid Block Order service. Such an exclusion does not affect the use of Binding Block Orders which do not require a firm-up. A good score is based on firming-up in time during the firm-up phase, keeping order quantity as indicated and not creating a match-break (e.g. due to change of limit price).

To enable an order execution after receiving a Firm-up Request Message, a new Firmed-up Block Order has to be entered via Enter Order Message [O] referencing the Indicative Block Order via Order Token to participate in the firm-up phase. The Firmed-up Block Order should be entered as soon as possible, before the firm-up phase has expired to increase the chance of an execution.



#### Further Reading

OUCH Trading Interface (OTI) Specification (Version 1.6.0)

## 5.2.2 Technical Impact on Standard Trading Interface (STI) - Orders and Executions

The following table highlights all impacted messages and fields:

Message Type	FIX Tag	Change
New Order Single (MsgType=D)	ClOrdLinkID (583)	New FIX Tag
	MinQty (110)	Value = 0 is interpreted as if no value is provided. For a limit order with RoutingInstruction = 'SWML' the MinQty must not be smaller than the Block threshold in CHF divided by the limit price.
	OrderCondition (27001)	New FIX Tag

	TimeInForce (59)	For RoutingInstruction= 'SWML' following TimeInForce options are available: If OrderCondition = 1 then mode 0, 6 are available If OrderCondition = 2 or 3 then modes 0,3,4,6 are available.
	ManualOrderIndicator (1028)	New FIX Tag
Execution Report (MsgType=8)	ClOrdLinkId (583)	New FIX Tag
	ExecType (150)	Changed – new value
	OrderCondition (27001)	New FIX Tag
	ManualOrderIndicator (1028)	New FIX Tag
	ReputationalScore (27002)	New FIX Tag
Order Cancel Replace Request (MsgType=G)	TimeInForce (59)	Amended description

### 5.2.3 Technical Impact on Standard Trading Interface (STI) – Confirmations

The following table highlights all impacted messages and fields:

Message Type	FIX Tag	Change
Confirmation (MsgType=AK)	OrderType (26563)	Changed – new emulator



#### Further Reading

- Standard Trading Interface (STI) Specification - Orders and Executions (Version 2.63.0)
- Standard Trading Interface (STI) Specification - Confirmations (Version 2.27.0)

### 5.2.4 Technical Impact on Reference Data Interface (RDI)

The following table highlights all impacted messages and fields:

File/Object	Impacted Fields	Impact
TradedInstrument.txt	postTradeLisThreshold	New field (Replaces postTradeLISThreshold)
	postTradeLisCurrency	New field
	preTradeBlockThresholdChf	New field
TradingSegment.txt	randomizedBlockOrderInterval	New field
	automatedBlockOrderFirmUpInterval	New field
	manualBlockOrderFirmUpInterval	New field
	blockOrderFlag	New field

To further highlight, existing attribute **postTradeLISThreshold** has been **removed** from the **TradedInstrument.txt** file and **replaced** with **postTradeLisThreshold**.



### Further Reading

Reference Data Interface (RDI) Specification (Version 2.26.0)

## 5.2.5 Technical Impact on Participant Trade Reconciliation Report (TRR)

The following table highlights all impacted fields:

Data Field	Impact
orderType	Changed - New enumerator



### Further Reading

Participant Trade Reconciliation Report Specification (Version 1.43.0)

## 5.2.6 Technical Impact on Participant Order Reconciliation Report (ORR)

The following table highlights all impacted fields:

Data Field	Impact
ClOrdLinkID	New field
RoutingInstruction	Changed - New enumerator
OrderCondition	New field
ManualOrderIndicator	New field



### Further Reading

Participant Order Reconciliation Report Specification (Version 1.21.0)

## 5.2.7 Technical Impact on Sponsored Access FIX Drop Copy Interface (SA FDC)

The following table highlights all impacted messages and fields:

Message Type	FIX Tag	Change
Execution Report (MsgType=8)	ClOrdLinkID (583)	New FIX Tag
	ExecType (150)	New enumerator
	RoutingInstruction (9487)	New enumerator
	OrderCondition (27001)	New FIX Tag
	ManualOrderIndicator (1028)	New FIX Tag
	ReputationalScore (27002)	New FIX Tag



### Further Reading

Sponsored Access FIX Drop Copy Interface Specification (Version 1.39.1)

## 5.3 Trading and Alternative Trading

### 5.3.1 Different Pre-Trade Control Values per Trading Service

With SMR10, SIX Swiss Exchange will support different values for order pre-trade controls for the Central Limit Order Book (CLOB) as well as for the trading services “SwissAtMid and “Swiss EBBO”.

For the “Quote on Demand” trading service, SIX Swiss Exchange already supports different pre-trade control parameters compared to the Quote Driven Market since SMR9, and these will also be provided in the new PreTradeControl.txt file mentioned below.



Please go to section 4.2.1 for a detailed business description.

#### 5.3.1.1 Technical Impact on Reference Data Interface (RDI)

The following table highlights all impacted messages and fields:

File/Object	Impacted Fields	Impact
PreTradeControl.txt (New)	tradingSegmentId	New field
	bookType	New field
	priceCollarFactor	New field (Replaces priceCollarFactor in TradingSegment.txt)
	maxOrderValue	New field (Replaces maxOrderValue in TradingSegment.txt)
	orderDeviationLimit	New field (Replaces qodOrderDeviationLimit in TradingSegment.txt)

To further highlight, with the introduction of this new file and its attributes, the following **existing attributes** have been **removed** from the **TradingSegment.txt** file: priceCollarFactor, maxOrderValue, qodPriceCollarFactor, qodMaxOrderValue and qodOrderDeviationLimit.



#### Further Reading

Reference Data Interface (RDI) Specification (Version 2.26.0)

### 5.3.2 Enhancements to the “Quote on Demand” Trading Service

The changes described enable the following improvements among others:

- Extended OTI for buy side participants in QOD (available from Membertest stage 2 and 3)
- Extended OTI for liquidity providers in QOD (available from Membertest stage 2 and 3)
- Delayed Publication for QOD trades (functionally available from Membertest stage 3)

The following three changes are enabled in Membertest stage 1:

- Integrated OTI based pre-trade and trade data into the existing reporting
- Integrated OTI based pre-trade data from OTI based liquidity providers into the existing reporting
- Enabled reporting about two-sided quoting discipline of OTI based liquidity providers



Please go to section 4.2.2 for a detailed business description.

### 5.3.2.1 Technical Impact on OUCH Trading Interface (OTI)

The following table highlights all impacted messages and fields:

#### Outbound Sequenced Messages

Message Type	Impacted Fields	Impact
QOD Accepted Message [A]	All	New Message Type
QOD Replaced Message [U]	All	New Message Type
Cancelled Message [C]	Reason	Added Explanations
Executed Order Message [E]	Book Type	Added Notes
Rejected Order Message [J]	Reason	New Reason and added Explanations

#### QOD Orders - Inbound Messages

Message Type	Impacted Fields	Impact
QOD Enter Order Message [o]	All	New Message Type
QOD Replace Order Message [u]	All	New Message Type

#### QOD Orders - Outbound Sequenced Messages

Message Type	Impacted Fields	Impact
QOD Accepted Message [a]	All	New Message Type
QOD Replaced Message [u]	All	New Message Type
QOD Auction Update Message [i]	All	New Message Type

#### QOD Liquidity Provider Orders - Inbound Messages

Message Type	Impacted Fields	Impact
QOD LP Enter Order Message [2]	All	New Message Type
QOD LP Replace Order Message [3]	All	New Message Type

#### QOD Liquidity Provider Orders - Outbound Sequenced Messages

Message Type	Impacted Fields	Impact
QOD LP Request for Quote Message [1]	All	New Message Type
QOD LP Accepted Message [4]	All	New Message Type
QOD LP Replaced Message [5]	All	New Message Type



### Further Reading

OUCH Trading Interface (OTI) Specification (Version 1.6.0)

## 5.3.2.2 Technical Impact on ITCH Market Data Interface (IMI)

The following table highlights all impacted messages and fields:

Message Type	Impacted Fields	Impact
Trade Message [P]	Execution Time	<p>New Field</p> <p><b>Memberbest:</b> available from stage 2. From this moment, the field will always contain the value 0 (to indicate immediate publication). The existing "Timestamp" field is used for both the execution and publication time.</p> <p><b>Stage 3 Memberbest phase</b></p> <p>The Delayed Publication functionality is enabled. The field will be populated with a value in nanoseconds after epoch (UTC) for trades where delayed publication is applicable.</p> <p><b>Production</b></p> <p>The Delayed Publication functionality is available and enabled. The field will be populated with a value in nanoseconds after epoch (UTC) for trades where delayed publication is applicable.</p>
	Match Number	<p><b>Due to cases of delayed trade publication the numbers are not guaranteed to be contiguous or incrementing.</b></p>



### Further Reading

ITCH Market Data Interface (IMI) Specification (Version 1.7.2)

## 5.3.2.3 Technical Impact on Participant Trade Reconciliation Report (TRR)

The following table highlights all impacted fields:

Data Field	Impact	Available from	
publicationDelay	New field	<b>Memberbest:</b> available from stage 2	<b>Production</b>



### Further Reading

Participant Trade Reconciliation Report Specification (Version 1.43.0)

## 5.3.2.4 Technical Impact on SIX MDDX Interface (SIX MDDX)

There is no direct technical impact on the interface or specification, but rather a behavioral change in the area of delayed publication for QOD Trades which should be considered.

QOD trades subject to delayed publication will be published at the publication time and not at the execution time via the SIX MDDX interface.

The following table highlights all impacted messages and fields:

Message Type	Impacted Fields	Impact
Trade [TR]	ExecutionTime	Time at which the trade took place
	PublishTime	Time at which the trade is published (may differ from execution time in case of delayed publication) Publication Mode = 2 / LRGS

 Please go to section 4.2.2.3 for a detailed business description.

### 5.3.3 Change of Enumerators for Trade Flag “LastLiquidityInd”

In order to be aligned to the FIX standard, the enumerator for Auction in LastLiquidityInd (FIX Tag 851) will be changed from the value 3 to 4.

#### 5.3.3.1 Technical Impact on Standard Trading Interface (STI) - Confirmations

The following table highlights all impacted messages and fields:

Message Type	FIX Tag	Change
Confirmation (MsgType=AK) Outbound	LastLiquidityInd (851)	New enumerator for Auction: 4 instead of 3

#### Further Reading

Standard Trading Interface (STI) Specification - Confirmations (Version 2.27.0)

#### 5.3.3.2 Technical Impact on Participant Trade Reconciliation Report (TRR)

The following table highlights all impacted messages and fields:

Data Field	Value	Change
lastLiquidityInd	Auction	Changed – New enumerator for Auction: 4 instead of 3

#### Further Reading

Participant Trade Reconciliation Report Specification (Version 1.43.0)

### 5.3.4 New “Minimum Execution Quantity” Field in OUCH Trading Interface (OTI)

This is a new field which should be used to define the minimum acceptable quantity to execute per trade in SwissAtMid.

It impacts the following order placements that interact with the SwissAtMid Book:

- “F” Limit Plus order
- “L” SwissAtMid Block order
- “M” SwissAtMid order
- “P” Iceberg Plus order
- “S” Sweep SwissAtMid order

For Iceberg Plus orders, this field can now be used to define the minimum execution quantity separately from the visible quantity (both were previously defined in the same field; Secondary Quantity).

#### Impact on Secondary Quantity

For backwards compatibility purposes, the minimum execution quantity can still be defined in this field Secondary Quantity, however Minimum Execution Quantity should be used for this purpose instead.



#### Please note

A value > 0 defined in the new Minimum Execution Quantity field overrides any value set in the Secondary Quantity field.

#### 5.3.4.1 Technical Impact on OUCH Trading Interface (OTI)

The following table highlights all impacted messages and fields:

Message Type	Impacted Fields	Impact
Enter Order Message [O]	Minimum Execution Quantity	New field
Replace Order Message [U]		
Accepted Message [A]		
Replaced Message [U]		
Firm-up Request Message [F]		
Rejected Order Message [J]	Reason	Existing reject reason “N” now also applies to new field “Minimum Execution Quantity” as well as “Secondary Quantity”

## 5.4 Trade and Transaction Reporting

### 5.4.1 Cancellations of Off Order Book and Off Exchange Trades

Participants and reporting members have now the possibility to cancel On Exchange - off book and Off Exchange trades via Standard Trading Interface (STI) and/or Reporting GUI on T and T+1 (if not cleared).



Please go to section 4.3.1 for a detailed business description.

#### 5.4.1.1 Technical Impact on Standard Trading Interface (STI) – Confirmations

The following table highlights all impacted messages and fields:



Message Type	FIX Tag	Change
Confirmation (MsgType=AK) Outbound	TradeCondition (277)	New possible value: 9004 = Participant



### Further Reading

Standard Trading Interface (STI) Specification - Confirmations (Version 2.27.0)

## 5.4.1.2 Technical Impact on Standard Trading Interface (STI) - Trade Reporting

Inbound Trade Capture Report messages are now also used for Entering participant or on-behalf trade cancellation requests.

The following table highlights all impacted messages and fields:

Message Type	FIX Tag	Change
Trade Capture Report (MsgType=AE) Inbound	TradeReportTransType (487)	New possible value and amended Description
	TradeReportType (856)	Amended Description
	TrdType (828)	Amended Description
	TradeReportRefID (572)	Amended Description
	NoTrdRegTimestamps (768)	New possible value and amended Description
	SettlDate (64)	Amended Description
	NoSides (552)	Amended Description
	NoClearingInstructions (576)	Amended Description
	OrigTrdMatchID (6555)	Amended Description
	Tariff (6577)	Amended Description
Trade Capture Report (MsgType=AE) Outbound	TradeReportTransType (487)	New possible value and amended Description
	TradeReportType (856)	Amended Description
	OrigTrdMatchID (6555)	Amended Description
Trade Capture Report Ack (MsgType=AR) Inbound	TradeReportTransType (487)	New possible value and amended Description
	TradeReportType (856)	Amended Description
	TrdType (828)	Amended Description
	OrigTrdMatchID (6555)	Amended Description
Trade Capture Report Ack (MsgType=AR) Outbound	TradeReportTransType (487)	Amended Description
	TradeDate (75)	Amended Description
	TransactTime (60)	Amended Description
	NoPartySubIDs (802)	Amended Description
	OrigTrdMatchID (6555)	Amended Description



### Further Reading

Standard Trading Interface (STI) Specification - Trade Reporting (Version 4.20.0)

#### 5.4.1.3 Technical Impact on Participant Trade Reconciliation Report (TRR)

The following table highlights all impacted fields:

Data Field	Change
tradeCondition	Changed - New enumerator



### Further Reading

Participant Trade Reconciliation Report Specification (Version 1.43.0)

#### 5.4.1.4 Technical Impact on SIX MDDX Interface (SIX MDDX)

The following table highlights all impacted messages and fields:

Message Type	Impacted Fields	Impact
Trade Cancellation Message [TC]	CancellationReason	New enumerator



### Further Reading

SIX MDDX Interface Specification (Version 1.23.0)

#### 5.4.2 New Trade Type "DerivativeHedge" for Trade Reports

The new field "DerivativeHedge" has been added to incoming AE and AR messages, so that delta hedge trades can be reported.



Please go to section 4.3.2 for a detailed business description.

#### 5.4.2.1 Technical Impact on Standard Trading Interface (STI) - Trade Reporting

The following table highlights all impacted messages and fields:

Message Type	FIX Tag	Change
Trade Capture Report (MsgType=AE) Inbound	DerivativeHedge (27100)	New FIX Tag
Trade Capture Report Ack (MsgType=AR) Inbound	DerivativeHedge (27100)	New FIX Tag



### Further Reading

Standard Trading Interface (STI) Specification - Trade Reporting (Version 4.20.0)

## 5.5 Removal of Symbol (FIX Tag 55)

With SMR9.1, Symbol (FIX Tag 55) was changed from mandatory to an optional field. Now with SMR10, Symbol will be completely removed from most interfaces, but will still remain within the FIX dictionary for the reason described below.

In FIX 4.4 Symbol (FIX Tag 55) is no longer mandatory in the FIX Instrument component, but it is required if the FIX Instrument component is used in a repeating group. As a result, for some interfaces, Symbol (FIX Tag 55) is still conditionally required (in messages that use repeating groups that include the FIX Instrument component).

These changes affect the specifications as shown in the following tables:

### Standard Trading Interface (STI) – Orders and Executions

Message Type	FIX Tag	Change
New Order Single (MsgType=D)	Symbol (55)	Removed
Execution Report (MsgType=8)	Symbol (55)	Removed
Order Cancel Request (MsgType=F)	Symbol (55)	Removed
Order Cancel Replace Request (MsgType=G)	Symbol (55)	Removed
Market Data Incremental Refresh (MsgType=X)	Symbol (55)	Removed

### Standard Trading Interface (STI) – News

Message Type	FIX Tag	Impact
News (MsgType=B)	Symbol (55)	Conditionally required by FIX standard

### Standard Trading Interface (STI) – Trade Reporting

Message Type	FIX Tag	Impact
Trade Capture Report (MsgType=AE) Inbound & Outbound	Symbol (55)	Removed
Trade Capture Report Ack (MsgType=AR) Inbound & Outbound	Symbol (55)	Removed

### Standard Trading Interface (STI) - Confirmations

Message Type	FIX Tag	Impact
Confirmation (MsgType=AK) Outbound	Symbol (55)	Removed

### Standard Trading Interface (STI) – Bilateral Trading

Message Type	FIX Tag	Impact
Trade Capture Report (MsgType=AE) Inbound & Outbound	Symbol (55)	Removed
Trade Capture Report Ack (MsgType=AR) Inbound & Outbound	Symbol (55)	Removed
New Order Single (MsgType=D) Inbound	Symbol (55)	Removed
Quote Request (MsgType=R) Outbound	Symbol (55)	Conditionally required by FIX standard
Execution Report (MsgType=8) Outbound	Symbol (55)	Removed
Quote (MsgType=S) Inbound & Outbound	Symbol (55)	Removed
Quote Response (MsgType= AJ) Inbound & Outbound	Symbol (55)	Removed

Quote Request Reject (MsgType=AG) Inbound	Symbol (55)	Conditionally required by FIX standard
Quote Status Report (MsgType=AI) Inbound & Outbound	Symbol (55)	Removed
Order Cancel Request (MsgType=F) Inbound	Symbol (55)	Removed
Security Status (MsgType=f) Inbound	Symbol (55)	Removed

### Sponsored Access FIX Drop Copy Interface (SA FDC)

Message Type	FIX Tag	Impact
Execution Report (MsgType=8)	Symbol (55)	Removed



#### Important Note

To ensure that any FIX messages which will no longer contain FIX Tag 55 and are sent by SIX towards participants are not rejected, participants and ISVs should adapt the dictionary used by their FIX engine in such a way that FIX Tag 55 (Symbol) is no longer defined as a mandatory field. This will prevent messages sent by SIX from being rejected.

## 5.6 Other Technical Changes

### 5.6.1 Specification Changes in Standard Trading Interface (STI) - Orders and Executions

The following table highlights all impacted messages and fields:

Message Type	FIX Tag	Change
New Order Single (MsgType=D)	CIOrdID (11)	Amended Description
Execution Report (MsgType=8)	Text (58)	Changed – New enumerator (10: lpBidOnly)
Order Cancel Request (MsgType=F)	CIOrdID (11)	Amended Description
Order Cancel Replace Request (MsgType=G)	CIOrdID (11)	Amended Description
	TimeInForce (59)	Amended Description
Market Data Incremental Refresh (MsgType=X)	MDEntryPx (270)	Amended Description
	MDEntrySize (271)	Amended Description
	MDEntryTime (273)	Amended both Datatype and Description
	OrderID (37)	Amended Description
	NoPartyIDs (453)	Requested FIX Tag and amended Description
	PartyID (448)	Requested FIX Tag
	PartyIDSource (447)	Requested FIX Tag
PartyRole (452)	Requested FIX Tag	



#### Further Reading

Standard Trading Interface (STI) Specification - Orders and Executions (Version 2.63.0)

## 5.6.2 Specification Changes in Standard Trading interface (STI) – Bilateral Trading

The following table highlights all impacted messages and fields:

Message Type	FIX Tag	Change
Trade Capture Report (MsgType=AE) Inbound	TradeReportID (571)	Amended Description
Trade Capture Report Ack (MsgType=AR) Inbound	TradeReportID (571)	Amended Description
New Order Single (MsgType=D) Inbound	CIOrdID (11)	Amended Description



### Further Reading

Standard Trading Interface (STI) Specification - Bilateral Trading (Version 1.45.0)

## 5.6.3 Specification Changes in Reference Data Interface (RDI)

With SMR9.1, SIX Swiss Exchange introduced functionality allowing Market Makers and Liquidity Providers to suspend their own instruments due to a knock out event, and for Liquidity Providers to set their securities into an “LP Bid only” trading state.

With SMR10, participants will now be able to identify the segments in which the above states can be set with two new attributes available in the TradingSegment.txt file.

The following table highlights all impacted files and fields:

File/Object	Impacted Fields	Impact
TradingSegment.txt	hasParticipantSuspensionFlag	New field
	bidOnlyModeFlag	New field

### 5.6.3.1 Introduction of an Additional (SHA-512) Checksum File for RDI Files

In addition to the existing MD5 hash files already produced, SIX Swiss Exchange will also generate and make available additional SHA-512 files which can optionally be used to verify the data integrity of a data file after downloading. There are no plans to decommission the current existing MD5 hash files, and the new SHA-512 hash files will be published next to the existing MD5 hash files, via SCAP and the Member Section.



### Further Reading

Reference Data Interface (RDI) Specification (Version 2.26.0)

## 5.6.4 Specification Changes in Sponsored Access FIX Drop Copy Interface (SA FDC)



Please go to section 4.6.1.2 for a detailed business description.

The following table highlights the additional changes and impacted messages and fields:

Message Type	FIX Tag	Change
Execution Report (MsgType=8)	OrdType (40)	New FIX Tag
	BookType (26561)	Changed – New and removed values



#### **Further Reading**

Sponsored Access FIX Drop Copy Interface Specification (Version 1.39.1)

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### **5.6.5 Changes Related to SIX Trading User Interface Formerly Known as the QOD UI**

The SIX Trading User Interface which was formerly known as the Quote On Demand User Interface (QOD UI) can now be used for submitting, maintaining and deleting both QOD requests and also SwissAtMid Block Orders, hence the name change.

As a result there have been changes to the URLs which are to be used to launch the SIX Trading User Interface in Production and Membertest, and the correct links can be found in the SIX Trading User Interface - User Manual.



#### **Further Reading**

SIX Trading User Interface - User Manual (Version 1.10)

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## 6 Regulatory Impact



### Business Audience

The functional changes introduced with SMR10 also necessitate changes to the rules and regulations. The following Rules, Directives and Guidelines are affected in this respect and have been amended accordingly:

- [Rules](#) of SIX Swiss Exchange AG
  - Trading Rules
  - Reporting Office Rules
- [Directives](#) of SIX Swiss Exchange AG
  - Directive 2: Technical Connectivity
  - Directive 3: Trading
  - Directive 5: Alternative Trading
  - Directive 7: Sponsored Access
- [Guidelines](#) of SIX Swiss Exchange AG
  - "Trading Parameters" Guideline
  - List of Charges under the Trading Rules
  - List of Charges under the Reporting Rules
- [Guides](#) of SIX Swiss Exchange AG
  - Trading Guides

### 6.1 Trading and Reporting Regulations

The amended trading and reporting regulations for SMR10 enter into force on 6 December 2021 and are now published under the following links on the website of the Swiss Stock Exchange:

Document	Link
Trading Rules	<a href="https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html">https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html</a>
Directives	<a href="https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html#directives">https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html#directives</a>
Guidelines	<a href="https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html#guidelines">https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html#guidelines</a>

The following table contains a detailed overview of the amendments to the Rules, Directives and Guidelines of SIX Swiss Exchange Ltd as of 6 December 2021:

Document	Type	Reference	Title
Trading Rules	Change	Clause 3.2	Participation in a clearing and settlement organisation
	Change	Clause 4.5 para. 1 lit. e)	Duty to provide information
	Change	Clause 10.5 para. 2	Market control
	Change	Clause 10.8 para. 2	Pre-trade transparency
	Change	Clause 10.10.3 para. 1 - 3	Deletion of orders and cancellation of trades
	Change	Clause 15 para. 3	General provisions
	Change	Clause 17.1.3 para. 1	General Clearing Member (GCM)
	Change	Clause 22 para. 4 - 6	Confidentiality

Document	Type	Reference	Title
	New	Clause 23 para. 2	Data protection
	Change	Clause 26 para. 2	Binding nature
	New	Clause 30 para. 22	Revision
Reporting Office Rules	New	Clause 2.5 para. 2	Reporting deadlines
	Change	Clause 2.5 para. 3	Reporting deadlines
	Change	Clause 2.7.2 para. 1 and 3	Cancellation
	Change	Clause 5.4 para. 2	Applicable law and place of jurisdiction
	Change	Clause 5.5	Entry into force
	New	Annex A – Clause 2 lit. e)	General Supplements – Trade Types
Directive 2: Technical Connectivity	Change	Clause 6.1.1	Standard Trading Interface (STI)
	Change	Clause 6.1.2	OUCH Trading Interface (OTI)
	Change	Clause 6.1.3	Quote Trading Interface (QTI)
	Change	Clause 6.1.4	SIX Trading User Interface
Directive 3: Trading	Change	Clause 12 para. 2	Pre-trade controls
	New	Clause 13 para. 1 lit. e)	Trading interruption
	Change	Clause 23.1.2	Incorrect Trade Reports to the Exchange
	Change	Clause 23.2.1 para. 1 and 2	Cancellation of trade by Exchange
	New	Clause 23.2.2	Cancellation of Trade Reports by the participant
	Change	Clause 23.3	Effect of a cancellation
	New	Annex B – lit. e)	Trade Types
Directive 5: Alternative Trading	Change	Clause 3.1 para. 1	Trading interfaces
	Change	Clause 3.1 para. 2	Trading interfaces
	Deleted	Clause 4.2	Post-Trade Transparency
	Change	Clause 9.1	SwissAtMid – Tradeable securities
	Change	Clause 9.4 para. 2	SwissAtMid - Order book without pre-trade transparency
	New	Clause 9.4 para. 4	SwissAtMid - Order book without pre-trade transparency
	Change	Clause 9.5 para. 1	SwissAtMid - Definition of order
	Change	Clause 9.6 para. 1	SwissAtMid - Order types
	New	Clause 9.6 para. 5	SwissAtMid - Order types
	Change	Clause 9.7 para. 1 lit. e) – g)	SwissAtMid - Order specification
	New	Clause 9.7 para. 1 lit. i) 5. and lit. j) and k)	SwissAtMid - Order specification
	Change	Clause 9.8	SwissAtMid – Price Step



Document	Type	Reference	Title
	New	Clause 9.9	SwissAtMid – Firm-up phase for indicative Block orders
	Change	Clause 9.10.1 para. 1 and 2	SwissAtMid - Quantity-time priority
	Change	Clause 9.10.2 para. 2 and 3 lit. c	SwissAtMid - Mid-Point Price Execution
	New	Clause 9.12 para. 2	SwissAtMid - Pre-trade controls
	New	Clause 9.14	SwissAtMid – Post-Trade transparency
	New	Clause 9.15	SwissAtMid – Performance score for indicative Block orders
	Change	Clause 10.1 para. 1	Swiss EBBO - Tradeable securities
	Change	Clause 10.9	Swiss EBBO – Price Steps
	New	Clause 10.14	Swiss EBBO – Post-Trade transparency
	Change	Clause 11.1 para. 1	Quote on Demand - Tradeable securities
	Change	Clause 11.8 para. 1 and 2	Quote on Demand – Price Steps
	Change	Clause 11.14	Quote on Demand - Post-Trade transparency
Directive 7:	Change	Clause 5.1 para. 2	Principles
Sponsored Access	Change	Clause 8 para. 1	Risk management controls
Guideline “Trading Parameters”	Change	Annexes A, and B – Clause 2	Market model, order types and trading services
	Change	Annexes I and Q – Clause 2	Market model, order types and trading services
	Change	Annexes A, B, H, I and Q – Clause 3	Order values
	Change	Annexes A, B, H, I and Q – Clause 5	Price Steps
	Change	Annexes A, B, C, D and E – Clause 8	Deadline for reporting off-order-book trades
	New	Annexes I and Q – Clause 9.2	Delayed publication of off-order-book trades
	Change	Annex P – Clause 6.1	Market making
	New	Annex P – Clauses 6.1.4 and 6.1.5	Constant Proportion Portfolio Insurance (CPPI) Credit Default Warrants (CDW)
Guideline List of charges under the Trading Rules	New	Clause 5.4 para. 2	Cancellation Fee
	New	Clause 8.3 para. 2 lit. c)	Ad valorem fee
	Change	Annex A – Clause 1.2.7.1 lit. a) Nr. 2.	LPS CLOB requirements
	New	Annex M – Clause 5.1 lit. a)	LPS SwissAtMid requirements
	Change	Annex O – Clauses 2.1.1 and 2.1.2	QPS capacity fee for liquidity providers

Document	Type	Reference	Title
	Change	Annex P – Clauses 1, 2 and 4	Access Fee <ul style="list-style-type: none"> <li>• Direct connection via Managed and Leased Line</li> <li>• Direct connection via Proximity Service</li> <li>• Direct connection via an Access Point abroad</li> </ul>
Guideline List of Charges under the Reporting Rules	New	Clause 6.1 para. 2	Fee for corrections, deletions and cancellations of reports

The detailed list of the adjustments to the trading and reporting regulations can also be found under the following link on the SIX Exchange Regulations website:

Document	Link
Archive	<a href="https://www.ser-ag.com/en/resources/laws-regulations-determinations/archive.html">https://www.ser-ag.com/en/resources/laws-regulations-determinations/archive.html</a>

## 6.2 Trading Guides

The Trading Guides have also been revised in connection with the introduction of SMR10. The versions effective 6 December 2021 are now available under the following link on the website of The Swiss Stock Exchange:

Document	Link
Guides	<a href="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</a>

## 7 Overview of Documents and Artefacts



### Business and Technical Audience

Please be aware that changes highlighted in gray in the specification documents indicate changes which are introduced with Membertest stage 2.

Please find below the list of all documents and artefacts relevant to SMR10. Please refer to the revision history and the marked-up versions for what has changed since their last version.



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/manuals.html)

[https://secure.six-swiss-exchange.com/member\\_section/it/downloads.html](https://secure.six-swiss-exchange.com/member_section/it/downloads.html)

Status	Date	Subject	Reference
<b>General</b>			
Updated for SMR10	08.11.2021	SMR10 Release Guide (Version 3.00)	This document
Updated for SMR10	30.08.2021	SWXess Business Recovery Guide (Version 7.00)	SWX-RECV-MAN-GUID-700
Updated for SMR10	02.11.2021	IT Related Frequently Asked Questions (FAQ) and Known Issues	See <a href="#">Member Section</a>
<b>SIX Trading User Interface (formerly known as Quote On Demand User Interface (QOD UI))</b>			
Updated for SMR10	17.09.2021	SIX Trading User Interface - User Manual (Version 1.10)	SIX-TRD-UI-MAN-110
<b>Direct Trading Interfaces (OTI, QTI, IMI)</b>			
Updated for SMR10	21.07.2021	OUCH Trading Interface (OTI) Specification (Version 1.6.0)	SSX-OTI-TRD-SPEC-1.6.0
Updated for SMR10	20.04.2021	Quote Trading Interface (QTI) Specification (Version 1.7.0)	SSX-QTI-TRD-SPEC-1.7.0
Updated for SMR10	09.08.2021	ITCH Market Data Interface (IMI) Specification (Version 1.7.2)	SSX-IMI-TRD-SPEC-1.7.2
<b>Standard Trading Interface (STI)</b>			
Updated for SMR10	09.08.2021	Standard Trading Interface (STI) Specification - Orders and Executions (Version 2.63.0)	SWX-SPEC-STI-PRE-2.63.0
Updated for SMR10	23.04.2021	Standard Trading Interface (STI) Specification - Confirmations (Version 2.27.0)	SWX-SPEC-STI-CONF-2.27.0
Unchanged	17.04.2015	Standard Trading Interface (STI) Specification - Session Layer (Version 2.5.0)	SWX-SPEC-STI-SES-2.5.0
Updated for SMR10	09.08.2021	Standard Trading Interface (STI) Specification - News (Version 2.10.0)	SWX-SPEC-STI-NEWS-2.10.0
Updated for SMR10	13.08.2021	Standard Trading Interface (STI) Specification - Trade Reporting (Version 4.20.0)	SWX-SPEC-STI-TCRI-4.20.0
Updated for SMR10	20.08.2021	Standard Trading Interface (STI) FIX 4.4 Repository (new version 10.0.0)	see Member Section <a href="#">Downloads page</a>

Status	Date	Subject	Reference
<b>Reference Data Interface (RDI)</b>			
Updated for SMR10	02.08.2021	Reference Data Interface (RDI) Specification (Version 2.26.0)	SWX-VCA-SPEC-RDI-2.26.0
<b>SIX MDDX</b>			
Updated for SMR10	22.07.2021	SIX MDDX Interface Specification (Version 1.23.0)	SSX-MDDX-SPEC-1.23.0
<b>Trade and Transaction Reporting (TTR)</b>			
Unchanged	21.12.2020	Transaction Reporting Interface Specification (TRI - CH Style) (Version 4.11.0)	SER-TRX-INT-CH-4.11.0
Updated for SMR10	15.10.2021	Transaction and Trade Reporting User Manual (Version 10.0.0)	SIX-SSE-MAN-REP-1000
Unchanged	07.11.2018	Transaction Reporting Interface Specification (TRI - EU Style) (Version 1.10.0)	SER-TRX-INT-EU-1.10.0
<b>Transaction Reconciliation Report (TXR)</b>			
Unchanged	13.06.2019	Participant Transaction Reconciliation Report Specification (Version 1.7.0)	SSX-SWXS-SPEC-TXR-1.7.0
<b>Trade Reconciliation Report (TRR)</b>			
Updated for SMR10	02.08.2021	Participant Trade Reconciliation Report Specification (Version 1.43.0)	SSX-SWXS-SPEC-TRR-1.43.0
<b>Order Reconciliation Report (ORR)</b>			
Updated for SMR10	23.04.2021	Participant Order Reconciliation Report Specification (Version 1.21.0)	SSX-SWXS-SPEC-ORR-1.21.0
<b>Billing Report</b>			
Updated for SMR10	19.10.2021	Billing Report File (BRI) Interface Specification (Version 1.33.0)	SWX-SPC-BRI-1.33.0
<b>Sponsored Access Service</b>			
Updated for SMR10	09.08.2021	Sponsored Access FIX Drop Copy Interface Specification (Version 1.39.1)	SSX-SA-FDC-SPEC-1.39.1
Unchanged	16.04.2020	Sponsored Access File Interface (SFI) Specification (Version 1.7.0)	SSX-SA-SFI-SPEC-1.7.0
<b>Bilateral Trading Platform</b>			
Updated for SMR10	07.07.2021	Standard Trading Interface (STI) Specification - Bilateral Trading (Version 1.45.0)	SSX-SPEC-STI-BTR-1.45.0
Unchanged	04.06.2018	Valuation Price File Specification (Version 1.5.0)	SSX-SWXS-SPEC-VPF-1.5.0
<b>Buyback Program</b>			
Unchanged	27.04.2020	BPS Reporting Application Interface Specification (Version 1.8.0)	see Member Section <a href="#">BPS Downloads page</a>

## 8 Migration



### Business and Technical Audience

### 8.1 Migration Concept

The central SWXess infrastructure and all associated interfaces will be upgraded to SMR10 in a staged approach for Membertest but in one release for Production. The SMR10 changes will become active on the Monday after the corresponding migration weekend.

#### Membertest environment staged approach:

Stage	Date	Comments
Stage 1	30 August 2021	Contains mandatory interface changes
Stage 2	4 October 2021	Contains mandatory interface changes
Stage 3 (final stage)	1 November 2021	Contains <b>no</b> mandatory interface changes

#### Production Environment approach:

Date	Comments
6 December 2021	Contains mandatory interface changes

The upgrade to SWXess Maintenance Release 10 (SMR10) requires the migration of transactional as well as participant and instrument reference data. In addition, the migration to SMR10 requires configuration changes. SIX Swiss Exchange will ensure that the technical and business upgrade and migration impact on participants, ISVs, ASPs as well as data vendors is as minimal as possible.



**Participants, ISVs and ASPs will need to upgrade their trading applications and other infrastructure on the Production migration weekend.**

### 8.2 Business Migration

#### 8.2.1 Transactional Data

##### 8.2.1.1 Orders

All order books will be migrated to SMR10 in the Production migration by SIX Swiss Exchange. As a result of the migration, no active orders will be deleted from the order books and participants do not have to take any actions in this regard.

##### 8.2.1.2 On- and Off Order Book Trades

The on order book and off order book trades will be migrated to SMR10 in the Production migration and therefore no post-trade processing restrictions apply.

On Monday after the migrations it will be possible to correct and cancel on order book trades which were executed or reported on Friday before the migration by contacting Exchange Operations ([helpdesk.exc@six-group.com](mailto:helpdesk.exc@six-group.com) / +41 58 399 2475). Countertrades for trades executed on the Friday before the migration may also be carried out either by Exchange Operations or by participants themselves.

On Monday after the Production migration, SIX Swiss Exchange may on request correct and cancel off order book trades which were executed or reported on Friday before the migration on behalf of participants. However, it will not be possible for participants to correct and cancel these off order book trades themselves. The ability for participants to cancel off book trades themselves is available from Monday after the Production migration onwards and therefore only applies to off order book trades submitted on or after the Monday following the Production migration. Countertrades for off book trades executed on the Friday before the migration may be carried out either by Exchange Operations or by participants themselves.

Unmatched two-sided trade reports from before the Production migration will match against two-sided trade report legs entered after the migration. The same behavior applies to Delivery Reports.

Moreover, the following applies:

If these Conditions Are Fulfilled	Then the Following Takes Effect	Explanation
Unmatched two-sided trade report leg is entered <b>on the Friday before the Production migration</b> without the Delta Hedge Flag set.  AND  Unmatched two-sided trade report leg entered <b>on Monday after the Production migration</b> does have the Delta Hedge Flag set.	Two-sided trade report legs will still match.	Delta Hedge Flag is not a matching criterion.

### 8.2.1.3 Delayed Publication of Off Order Book Trades and Off Exchange Trades

Off order book and off exchange trades which have been reported before the Production migration and are subject to delayed publication according to Annex C: Delayed Publication of [Directive 3: Trading](#) will be published via Market Data Interfaces as usual after the migrations if applicable.

### 8.2.1.4 Transaction Reports

The Transaction Reports will be migrated to SMR10 in the production migration and therefore no post-trade processing restrictions apply.

## 8.2.2 Instrument and Segment Data

### 8.2.2.1 Instrument Data

#### SwissAtMid Block Order

For all instruments eligible for SwissAtMid Block Orders, the following configuration will apply for Production stage 1:

Attribute	Configuration
preTradeBlockThresholdChf	Defined by SIX Swiss Exchange Based on ESMA Large in Scale (LIS) Threshold values*
postTradeLisThreshold	Large in Scale (LIS) Threshold values calculated by SIX Swiss Exchange based on ESMA Method*
postTradeLisCurrency	CHF

\* The published ESMA Large in Scale (LIS) Threshold values can be found here:

[https://registers.esma.europa.eu/publication/searchRegister?core=esma\\_registers\\_fitrs\\_equities](https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_fitrs_equities)

This configuration change is transparent for the participants and will be transmitted via Reference Data Interface (RDI) and is available in the TradedInstrument file via the [Member Section](#) of SIX Swiss Exchange.

## SwissAtMid Trading Service

For all instruments eligible for the SwissAtMid Trading Service, the following configuration will apply for Production:

Attribute	Configuration
postTradeLisThreshold	Large in Scale (LIS) Threshold values calculated by SIX Swiss Exchange based on ESMA Method*
postTradeLisCurrency	CHF

\* The published ESMA LIS values can be found here:

[https://registers.esma.europa.eu/publication/searchRegister?core=esma\\_registers\\_fitrs\\_equities](https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_fitrs_equities)

This configuration change is transparent for the participants and will be transmitted via Reference Data Interface (RDI) and is available in the TradedInstrument file in the [Member Section](#) of SIX Swiss Exchange.

### 8.2.2.2 Segment Data

#### SwissAtMid Block Order

The following trading segments will be enabled for the new SwissAtMid Block Orders for Production:

tradingSegmentId	tradingSegmentDescription	securityExchange	instrumentPartitionCode
25	Blue Chip Shares	XSWX	P1
591	Mid-/Small Cap Shares		

The following configuration will apply for the above listed trading segments in relation to SwissAtMid Block Orders for Production:

Attribute	Configuration
blockOrderFlag	Y
randomizedBlockOrderInterval	50 (milliseconds)
automatedBlockOrderFirmUpInterval	450 (milliseconds)
manualBlockOrderFirmUpInterval	30 (seconds)

This configuration change is transparent for the participants and will be transmitted via Reference Data Interface (RDI) and is available in the TradingSegment file in the [Member Section](#) of SIX Swiss Exchange.

The configuration will be done for the respective environment during the Membertest stage 1 and Production migration.



#### Important Note

In order to facilitate testing of SwissAtMid Block Orders during Membertest stages 1 and 2, SIX Swiss Exchange will initially configure some parameters differently from the configuration planned for Production. Find further details in section 9.2.1 of this document.

#### Delayed Publication for QOD Trades

The following Trading Segments will be enabled for delayed publication of Quote on Demand trades which are large in scale transactions (LIS) in accordance with Art. 28 para. 4 let. a [FMIO](#) for Production:

tradingSegmentId	tradingSegmentDescription	securityExchange	instrumentPartitionCode
584	ETF	XSWX	P2
585	ETF on bonds of the Swiss Confederation		
588	ETP		

The following configuration will apply for the above listed trading segments in relation to QOD Delayed Publication for Production:

QOD Trade Turnover CHF	QOD Trade Publication
Smaller than 10 million	Immediate Publication
Between 10 million and 50 million	Delayed Publication – 60 Minutes after the trade
Greater than 50 million	Delayed Publication – End of Trading

The configuration will be done for the respective environment during the Membertest stage 3 and Production migration.

### QOD Order Deviation Limit

The application of the QOD Order Deviation Limit will be changed from the temporary value of 99% (according to [SIX Swiss Exchange message 23/2021](#)), to the default value of 10% for the following Trading Segments:

tradingSegmentId	tradingSegmentDescription	securityExchange	instrumentPartitionCode
584	ETF	XSWX	P2
585	ETF on bonds of the Swiss Confederation		
588	ETP		

The configuration will be done for the respective environment during the Membertest stage 2 and Production migration.

## 8.2.2.3 Participant Reference Data

### Extension of QOD Quotes to OUCH Trading Interface (OTI)

Participants interested in acting as Liquidity Providers for Quote on Demand over OTI will require additional new dedicated OTI (OUCH) Liquidity Provider users for Production.

Interface	Role	Partition	Trading Access
OTI	Liquidity Provider QOD	P2	584 - ETF 585 - ETF on bonds of the Swiss Confederation 588 - ETP

Participants are kindly invited to request the configuration of new OTI Liquidity Provider users by submitting the [Application for Quote on Demand Liquidity Provider](#) to Member Services ([member.services@six-group.com](mailto:member.services@six-group.com)).

Member Services will setup the requested OTI Liquidity Provider users in the Membertest stage 2 environment in order that Liquidity Providers can test Quote on Demand order entry prior to the Production go-live.

When SMR10 is introduced with the Production migration, all Liquidity Provider OTI users configured for the Membertest stage 2 environment will automatically also be enabled for the Production environment. If Liquidity Providers wish to test Quote on Demand in the Membertest environment but do not wish to enable the OTI Liquidity Provider users on the go-live in Production, please contact Member Services ([member.services@six-group.com](mailto:member.services@six-group.com)). Liquidity Providers can request the new OTI users for the Membertest environment only to test the functionality. Please use the Application for Quote on Demand Liquidity Provider for any configuration requests.

Please note that any configuration changes must be **requested by 26 November 2021 at the latest** in order that SIX Swiss Exchange can guarantee the correct migration to the Production environment.





### Important Note

Note that participants who are acting as Liquidity Providers for Quote on Demand in the Production environment and have the respective OTI Liquidity Provider users, will be assigned **200 Orders per Second of the Shared Capacity pool** for Quote on Demand by default free of charge if the Liquidity Provider fulfils the obligations according to Annex N - Clause 2 [List of Trading Charges](#). SIX Swiss Exchange has limited the amount of Shared Capacity for QOD per Liquidity Provider to 200 Orders per Second. The QOD Shared Capacity can only be used for the Quote on Demand trading service and not for Market Making in the Quote Driven Market.

### Different Pre-Trade Control Values per Trading Service

SIX Swiss Exchange will support different values for the following order pre-trade controls for the Central Limit Order Book (CLOB) as well as for the trading services "SwissAtMid" and "Swiss EBBO" for Production:

- Price Collar
- Maximum Order Value
- Maximum Order Volume

For the Quote on Demand trading service, SIX Swiss Exchange already supports different pre-trade control parameters compared to the Quote Driven Market since SMR9.

The following configuration will apply to the trading segments in relation to the above mentioned Pre-Trade Controls:

Trading Segment ID	Trading Segment Name	Trading Service	Max Order Value CHF	Price Collar Factor
25	Blue Chip Shares	CLOB EBBO	100,000,000	9
		MPOB	250,000,000	
591	Mid-/Small-Cap Shares	CLOB EBBO	50,000,000	9
		MPOB	250,000,000	
594	Investment Funds	CLOB MPOB	50,000,000	9
618	Sparks Shares			
580	Structured Products	PVM	10,000,000	99
598	Rights and Options	CLOB		
584	Exchange Traded Funds (ETF)	QDM	10,000,000	9
		QOD	250,000,000	
595	ETF on bonds of the Swiss Confederation	QDM	10,000,000	9
		QOD	250,000,000	
588	Exchange Traded Products (ETP)	QDM	10,000,000	9
		QOD	250,000,000	

586	Exchange Traded Structured Funds (ETSF)	QDM	10,000,000	9
592	Secondary Listing Shares	CLOB		
597	Separate Trading Lines	CLOB		
612	Sponsored Funds	QDM		
613	Sponsored Foreign Shares	QDM		
581	Bonds – Non CHF	QDM	50,000,000	9
582	Bonds – Non CHF – MD	QDM		
589	Bonds – CHF Swiss Confederation	CLOB		
590	Bonds – CHF	CLOB		
615	Bonds – CHF – MD	CLOB		
617	Bonds – CHF Swiss Pfandbriefe	CLOB		

Participants will receive the new values via the new PreTradeControl file via the Reference Data Interface (RDI).

**! Important Note**

Please note that the Trading Segment configuration provided during the Membertest stage 1 and 2 already includes the values for go-live in Production.

**Trading Suspension and “Bid-Only” Flag via QTI for Structured Products**

With the SMR9.1 release, the following trading segment was enabled for trading suspension and “bid-only” flag via QTI and will apply for Production stage 1 :

tradingSegmentId	tradingSegmentDescription	securityExchange	instrumentPartitionCode
580	Structured Products	XQMH	P2

The following configuration was also applied for the above listed trading segment in relation to trading suspension and “bid-only” flag via QTI.

RDI File	Attribute	Configuration
TradingSegment.txt	hasParticipantSuspensionFlag	TRUE
	bidOnlyModeFlag	TRUE

With SMR10, participants will newly be able to see the above-mentioned new attributes in the TradingSegment file via the Reference Data Interface (RDI).

The configuration will be done for the respective environment during the Membertest stage 1 and 2 and Production migration.

**Override of Auto-execution Duration for QOD Auctions**

The possibility for participants to override the default Auto-execution duration for QOD Auctions will be available from the SMR10 Production.

Participants interested in overriding the default Auto-execute duration for QOD Auction and replacing it with a custom value may submit a completed and signed [PartyID and SenderCompID Configuration Form](#) to Member Services ([member.services@six-group.com](mailto:member.services@six-group.com) / +41 58 399 2473). This custom value is valid for the Auto-execute part of the “Auto-execute or Cancel” or “Auto-execute and Optional Discretion” Trading modes for QOD Auctions.

Member Services will setup the requested custom duration in the Membertest stage 3 environment for the specified PartyID in order that participants can test this functionality prior to the Production go-live.

When SMR10 is introduced in the Production environment with the Production migration, all PartyIDs configured with a custom duration for the Membertest stage 3 environment will automatically also be enabled for this in the Production environment. If participants wish to test a custom duration for Auto-execute in QOD Auctions in the Membertest environment but do not wish to enable this configuration on the go-live in Production, please contact Member Services ([member.services@six-group.com](mailto:member.services@six-group.com)).

Please note that any configuration changes must be **requested by 26 November 2021 at the latest** in order that SIX Swiss Exchange can guarantee the correct migration to the Production environment.

## 8.3 SWXess Migration Weekend

### 8.3.1 Main Activities

The main activities during the migration weekend will be:

- Upgrade of trading platform to SMR10
- Update of Member Own Applications (MOAs) by participants (if required)
- Verification of connectivity and login by participants after upgrade (strongly recommended)

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

### 8.3.2 Membertest Migration Schedule

The Membertest Migration has been completed.

### 8.3.3 Production Migration Schedule

On Saturday and Sunday, your Local Support Center will be available between 10:00 and 20:00 CET.

Date	Time (CET)	Activity
Thu 2 December 2021	-	Final confirmation that the SMR10 Production migration will take place as scheduled by MSC and SSX Message.
Fri 3 December	-	Last trading day with SMR9.1
Sat 4 December 2021	All day	Upgrade of SWXess Trading Platform to SMR10 <b>Production</b>
	Approx. 16:00	Confirmation will be published on the system status page in the Member Section (and MSC Alert for Subscribers) that the upgrade has been completed.  Participants should check connectivity, login and migration and complete the recommended testing activities (see section 8.3.4).
	Following confirmation until 21:00	SWXess systems are running, connectivity is possible, however markets are closed and orders/quotes will be rejected.
Sun 5 December 2021	11:00 – 20:00	SWXess systems are running, connectivity is possible, however markets are closed and orders/quotes will be rejected.
		Participants should check connectivity, login and migration and complete the recommended testing activities (see section 8.3.4).

Date	Time (CET)	Activity
Mon 6 December 2021	As from 06:00	First trading day with SMR10 in Production environment (P01).

### 8.3.4 Connectivity Testing Checklist During Production Migration

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

Interface	Available via	Status P01	Recommended Testing Activities for P01
SCAP	-	<b>Fully available:</b> SCAP network and VPN tunnel connectivity re-established	Test network is up Test VPN tunnel status is up (e.g. ping 146.109.99.254)
Co-Location Access (P01 only)	-	<b>Fully available:</b> Network connectivity established	Test Co-Location Access network status is up
STI	SCAP	<b>Available without business functionality:</b> Session management tests 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/Ports) Test login
RDI	SCAP	<b>Fully available:</b> P01 reference data can be downloaded Note that the date of the file is 20211206	Download RDI files Process RDI files
IMI	SCAP and Co-Location Access (P01 only)	<b>Available without market updates:</b> User logins enabled Heartbeat messages are sent UDP re-requester available Reference Data available	Test network connectivity Test login Test your set-up and reception of messages
OTI	SCAP and Co-Location Access (P01 only)	<b>Available without business functionality:</b> User logins enabled Application messages are rejected Error "R" (the order is not allowed at this time)	Test network connectivity Test login
QTI	SCAP and Co-Location Access (P01 only)	<b>Available without business functionality:</b> User logins enabled Application messages are rejected Error "R" (quote not allowed at this time)	Test network connectivity Test login
SIX MDDX	SCAP	<b>Available without business functionality:</b> User logins enabled Heartbeat messages are sent	Test network connectivity Test login

## 9 Testing Activities During Member Test Phase



### Technical Audience

### 9.1 Scope of Member Test Phase

SIX Swiss Exchange recommends that all Trading Participants, Independent Software Vendors (ISVs), Application Service Providers (ASPs) and Data Vendors test their own applications and interfaces as well as business processes and back office workflows during the Member Test phase. The main focus of the Member Test phase is to verify the changes to the configuration and business functionality.

Suggested mandatory tests:

- New SwissAtMid Block Order type
- Delayed publication for QOD trades
- Removal of Symbol (FIX Tag 55)
- Change of the enumerator for Auction in LastLiquidityInd (FIX Tag 851)
- Attribute and enumerator changes in the Sponsored Access FIX Drop Copy Interface
- Recovery and Performance Tests

You are kindly invited to contact Member Services ([member.services@six-group.com](mailto:member.services@six-group.com) / +41 58 399 2473) if you require assistance with testing in the Membertest environment.

**We strongly recommend that all participants, ASPs and ISVs test their Member Own Applications (MOAs).**

- Test your Member Own Applications (MOAs) and verify that they are in-line with the latest SMR10 interface specifications, including full loop test with clearing and settlement. Please make sure that you test your transaction reporting upload and download according to the new specification.
- Participate in the scheduled tests organized by SIX Swiss Exchange:
  - Performance Load Tests
  - Background Load Tests
  - SWXess Intraday Recovery Tests

### 9.2 Special Membertest Configuration

#### 9.2.1 SwissAtMid Block Order

In the context of the new SwissAtMid Block Order service and to facilitate easier testing of the new functionality during Membertest stages 1, 2 and 3, SIX Swiss Exchange will initially apply a different configuration for the Firm-up Phase times and Performance Scoring to that planned for Production go-live.

The Firm-up Phase time intervals will be configured during Membertest stages 1, 2 and 3 as follows:

Environment	tradingSegmentId tradingSegmentDescription	Date	Attribute	Configuration
Membertest	591 - Mid-/Small-Cap Shares	From 30 August 2021 until 19 November 2021	randomizedBlockOrderInterval	30000 (milliseconds)
			automatedBlockOrderFirmUpInterval	90000 (milliseconds)
			manualBlockOrderFirmUpInterval	5 (minutes)
			randomizedBlockOrderInterval	50 (milliseconds)
			automatedBlockOrderFirmUpInterval	450 (milliseconds)

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from 22 November 2021	manualBlockOrderFirmUpInterval	30 (seconds)
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The Performance Scoring Threshold value will be configured to a significantly lower value during Membertest stages 1, 2 and 3 in order to facilitate testing by reducing the instances of an automatic suspension due to an ISIN Score breach as follows:

Environment	tradingSegmentId tradingSegmentDescription	Date	Attribute	Configuration
Membertest	25 – Blue Chip Shares 591 – Mid-/Small-Cap Shares	From 30 August 2021 until 19 November 2021	LISScoreThreshold	10%
		from 22 November 2021	LISScoreThreshold	70%

---

## 9.2.2 Enhancements to “Quote on Demand” Trading Service

To facilitate easier testing of the Quote on Demand trading service, during Membertest stages 1, 2 and 3, SIX Swiss Exchange will initially apply a different configuration for the following two trading segments to that planned for Production go-live:

Environment	tradingSegmentId tradingSegmentDescription	Date	Attribute	Configuration
Membertest	585 - ETF on bonds of the Swiss Confederation 588 - ETP	From 4 October 2021 until 19 November 2021	automatedQODAUctionDuration	90000 (milliseconds)
			randomQODAUctionDuration	30000 (milliseconds)
			extendedQODAUctionDuration	10 (minutes)
	from 22 November 2021	automatedQODAUctionDuration	990 (milliseconds)	
		randomQODAUctionDuration	10 (milliseconds)	
		extendedQODAUctionDuration	5 (minutes)	

## 9.3 Clearing and Settlement During Member Test Phase

The SIX SIS link for Clearing and Settlement is available during the Membertest stages 1, 2 and 3 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.

## 9.4 Trading Hours and Availability

The trading hours and the availability of the Membertest environment remain unchanged for the SMR10 Membertest stages 1, 2 and 3. Please refer to the following links for details:

Environment calendar:	<a href="https://www.six-group.com/en/products-services/the-swiss-stock-exchange/market-data/news-tools/environment-calendar.html">https://www.six-group.com/en/products-services/the-swiss-stock-exchange/market-data/news-tools/environment-calendar.html</a>
Trading hours:	<a href="https://www.six-group.com/dam/download/the-swiss-stock-exchange/trading/trading-provisions/trading-hours/Trading_Hours_Membertest.pdf">https://www.six-group.com/dam/download/the-swiss-stock-exchange/trading/trading-provisions/trading-hours/Trading_Hours_Membertest.pdf</a>

## 9.5 Performance Load Tests and Background Load Tests

During the SMR10 Membertest phase, SIX Swiss Exchange will hold **Performance Load Tests** on the Membertest infrastructure on the dates given in the table below.

Date	Time (CET)	Load Generated
Sat 09.10.2021 Sat 20.11.2021	10:00 to 15:00	The detailed load pattern will be published in a separate MSC Message before each test.

You are invited to participate in these 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.

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

Time (CET)	QPS Load	OTPS Load	FTPS Load
18:00 to 20:00	4000	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.

## 9.6 SWXess Intraday Recovery Tests

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
08.09.2021	09:30 to 12:00	Intraday Recovery Test – STI FIX Infrastructure down: Single FIX Gateway Failure
08.09.2021	14:00 to 17:00	Intraday Recovery Test – STI FIX Infrastructure down: Double FIX Gateway Failure
15.09.2021	14:00 to 17:00	Intraday Recovery Test – On Book Matcher Partition 1 “Equities” down
06.10.2021	14:00 to 17:00	Intraday Recovery Test – Both On Book Matcher Partitions down
13.10.2021	14:00 to 17:00	Intraday Recovery Test – On Book Matcher Partition 2 “Non-Equities” down
20.10.2021	09:30 to 12:00	Intraday Recovery Test – STI FIX Infrastructure down: Single FIX Gateway Failure
20.10.2021	14:00 to 17:00	Intraday Recovery Test – STI FIX Infrastructure down: Double FIX Gateway Failure
27.10.2021	14:00 to 17:00	Intraday Recovery Test – MDDX Infrastructure down
03.11.2021	14:00 to 17:00	Intraday Recovery Test – Both On Book Matcher Partitions down
24.11.2021	14:00 to 17:00	Intraday Recovery Test – Both On Book Matcher Partitions down



For full details, please refer to the document SWXess Business Recovery Guide (Version 7.00) .

### 9.6.1 Information During Intraday Recovery Tests



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

[https://secure.six-swiss-exchange.com/member\\_section/system\\_status\\_test.html](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\\_subscriptions.html](https://secure.six-swiss-exchange.com/member_section/user_subscriptions.html)



## Appendix A Known Issues

Open known issues will be published and tracked in the [SIX Member Section](#) as they arise.

## Appendix B Terms and Abbreviations

Term/Abbreviation	Explanation
ASP	Application Service Provider
BPS	Buyback, Price Stabilization, Sales during Buyback Program
BRI	Billing Report File Interface
CLOB	Central Limit Order Book
EBBO	European Best Bid and Offer
ESMA	European Securities and Markets Authority
FDC	Sponsored Access – FIX Drop Copy Interface
FIX	Financial Information eXchange Protocol
FMIA	Financial Markets Infrastructure Act
FMIO	Financial Markets Infrastructure Ordinance
FoK	Fill or Kill
FTPS	FIX Transactions (orders) per Second (STI)
IMI	ITCH Market Data Interface
ISV	Independent Software Vendor
IoC	Immediate or Cancel
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
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
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 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
XBTR	Bilateral Trading Platform
XOFF	Market Identifier Code for Off Exchange Transactions – Listed Instruments
XQMH	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

## Appendix C Matching Scenarios SwissAtMid Block Orders

The scenarios below provide some examples of how the new SwissAtMid Block Orders for the on exchange non-displayed trading service "SwissAtMid" behave.

Please note the following conditions apply for all matching scenarios:

- The SwissAtMid Block Order marked in **red** is the entering order potentially triggering a firm-up phase or execution
- The SwissAtMid Block Order marked in **orange** is being amended or has been firmed-up
- The SwissAtMid Block Order marked in **blue** is being rejected
- The orders which are in-limit in SwissAtMid are in *italic*
- The order ID provides an indication in which sequence the orders have entered the book(s)
- Self-Match Prevention in SwissAtMid is enabled for Party ID 4000
- The trading segment for all scenarios is "Blue Chip Shares"
- The Price Steps for SwissAtMid is 0.0001
- The Block Order Value threshold for SwissAtMid Block Orders is CHF 500'000
- The Performance Score threshold for indicative SwissAtMid Block Orders is 70

Further conditions are described in the respective scenario. Read the conditions of the scenarios as well as the order book constellations carefully.

## C.1 SwissAtMid Block Orders - Rejections

Scenario 1		SwissAtMid Block Order rejected due to Block Order Value Threshold											
Conditions		Mid-Point Price = 101.50											
Central Limit Order Book (CLOB)	Bid					Ask							
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty	Price (GL)	Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity		
						102.2500	5000	1000	O3	Good for Day SWMB	5000 P		
						102.0000	2000	-	O1	Good for Day SWX	1000 P		
2 2000 R	Iceberg Good Till Date SWX	O2	900	100	101.0000								
Mid-Point Order Book (MPOB)	Bid					Ask							
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.5000	10000 1'025'000	-	O6	Good Till Date SWML	Manual 78	3000 R
							102.2500	5000 511'250	1000 102'250	O3	Good for Day SWMB	-	5000 P
	4 4000 P	Indicative Automated 81	Block Good for Day SWML	O4	5000 510'000	50000 5'100'000	102.0000						
	7 7000 R	Binding -	Block Good for Day SWML	O7	5000 508'750	7500 763'125	101.7500						
	6 6000 R	-	Normal Good for Day SWM	O5	-	20000 2'030'000	101.5000	3000 304'500	-	O8	Block Good for Day SWML	Indicative Automated 85	8 8000 R
	<b>Result</b>		The indicative SwissAtMid Block Order is rejected because the volume of the order is lower than the required Block Order Value threshold										
<b>Comment</b>		SwissAtMid Block Orders must meet the Block Order Value threshold defined per security and published in the reference data provided by the Exchange.											

Scenario 2		SwissAtMid Block Order rejected due Performance Score breach												
Conditions		Mid-Point Price = 101.50												
Central Limit Order Book (CLOB)	Bid					Ask								
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty	Price (GL)	Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity			
						102.2500	5000	1000	O3	Normal Good for Day SWMB	5 5000 P			
						102.0000	2000	-	O1	Normal Good for Day SWX	1 1000 P			
2 2000 R	Iceberg Good Till Date SWX	O2	900	100	101.0000									
Mid-Point Order Book (MPOB)	Bid					Ask								
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity	
							102.5000	10000 1'025'000	-	O6	Block Good Till Date SWML	Indicative Manual 78	3 3000 R	
							102.2500	5000 511'250	1000 102'250	O3	Normal Good for Day SWMB	-	5 5000 P	
	4 4000 P	Indicative Automated 81	Block Good for Day SWML	O4	5000 510'000	50000 5'100'000	102.0000							
	7 7000 R	Binding -	Block Good for Day SWML	O7	5000 508'750	7500 763'125	101.7500							
	6 6000 R	-	Normal Good for Day SWM	O5	-	20000 2'030'000	101.5000	6000 609'000	-	O8	Block Good for Day SWML	Indicative Automated 68	8 8000 R	
<b>Result</b>	The indicative SwissAtMid Block Order is rejected because the ISIN score of the participant is lower than the Performance Score threshold.													
<b>Comment</b>	If the ISIN Performance Score of the participant is lower than the Performance Score threshold of 70, the participant is blocked from entering new Indicative SwissAtMid Block Orders for the remainder of the business day. When the participant is blocked all open indicative SwissAtMid Block Orders are removed from the order book. Binding SwissAtMid Block orders are not affected by the Performance Score and can still be entered.													

<b>Scenario 3</b>		<b>SwissAtMid Block Order rejected due Price Collar</b>											
<b>Conditions</b>		Reference Price = 101.00 Mid-Point Price = 101.50 Price Collar = 10%											
<b>Central Limit Order Book (CLOB)</b>	<b>Bid</b>						<b>Ask</b>						
	<b>Entity Party Capacity</b>	<b>Type Validity Routing</b>	<b>ID</b>	<b>Hidden Qty</b>	<b>Visible Qty</b>	<b>Price (GL)</b>	<b>Visible Qty</b>	<b>Hidden Qty</b>	<b>ID</b>	<b>Type Validity Routing</b>	<b>Entity Party Capacity</b>		
						102.2500	5000	1000	O3	Normal Good for Day SWMB	5 5000 P		
						102.0000	2000	-	O1	Normal Good for Day SWX	1 1000 P		
2 2000 R	Iceberg Good Till Date SWX	O2	900	100	101.0000								
<b>Mid-Point Order Book (MPOB)</b>	<b>Bid</b>						<b>Ask</b>						
	<b>Entity Party Capacity</b>	<b>Condition Indicator Scoring</b>	<b>Type Validity Routing</b>	<b>ID FU</b>	<b>MEQ Value</b>	<b>Quantity Value Orig Qty</b>	<b>Price</b>	<b>Quantity Value Orig Qty</b>	<b>MEQ Value</b>	<b>ID FU</b>	<b>Type Validity Routing</b>	<b>Condition Indicator Scoring</b>	<b>Entity Party Capacity</b>
							102.5000	10000 1'025'000	-	O6	Block Good Till Date SWML	Indicative Manual 78	3 3000 R
							102.2500	5000 511'250	1000 102'250	O3	Normal Good for Day SWMB	-	5 5000 P
	4 4000 P	Indicative Automated 81	Block Good for Day SWML	O4	5000 510'000	50000 5'100'000	102.0000						
	7 7000 R	Binding -	Block Good for Day SWML	O7	5000 508'750	7500 763'125	101.7500						
	6 6000 R	-	Normal Good for Day SWM	O5	-	20000 2'030'000	101.5000						
							90.0000	6000 540'000	-	O8	Block Good for Day SWML	Indicative Automated 73	8 8000 R
<b>Result</b>	The indicative SwissAtMid Block Order is rejected because the order price deviates more than the Price Collar Range from the Reference Price.												
<b>Comment</b>	If the order price deviates more than the Price Collar Range from the reference price, the order is rejected. The Price Collar Range is defined per trading segment and book and is published in the reference data of the Exchange.												

## C.2 SwissAtMid Block Orders – No Firm-up Phase Initiated

Scenario 4		No firm-up phase initiated due to Self-Match Prevention												
Conditions		Mid-Point Price = 101.50												
Central Limit Order Book (CLOB)	Bid					Ask								
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty	Price (GL)	Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity			
						102.2500	5000	1000	O3	Good for Day SWMB	5000 P			
						102.0000	2000	-	O1	Normal Good for Day SWX	1 1000 P			
2 2000 R	Iceberg Good Till Date SWX	O2	900	100	101.0000									
Mid-Point Order Book (MPOB)	Bid					Ask								
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity	
							102.5000	10000 1'025'000	-	O6	Block Good Till Date SWML	Indicative Manual 78	3 3000 R	
							102.2500	5000 511'250	1000 102'250	O3	Normal Good for Day SWMB	-	5 5000 P	
	4 4000 P	Indicative Automated 81	Block Good for Day SWML	O4	10000 1'017'500	50000 5'087'500	101.7500							
							101.5000	6000 609'000	-	O8	Block Good Till Date SWML	Indicative Manual 81	4 4000 P	
	7 7000 R	Binding -	Block Good for Day SWML	O7	5000 506'250	7500 759'375	101.2500							
6 6000 R	-	Normal Good for Day SWM	O5		20000 - 2'020'000	101.0000								
<b>Result</b>	No firm-up phase is initiated between O4 and O8 because Self-Match Prevention in SwissAtMid is activated for Party ID 4000.													
<b>Comment</b>	Both indicative SwissAtMid Block Orders from Party ID 4000 remain in the SwissAtMid order book.													



Scenario 5		No firm-up phase initiated due to Minimum Execution Quantity											
Conditions		Mid-Point Price = 101.50											
Central Limit Order Book (CLOB)	Bid					Ask							
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty	Price (GL)	Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity		
						102.2500	5000	1000	O3	Good for Day SWMB	5000 P		
						102.0000	2000	-	O1	Good for Day SWX	1000 P		
2000 R	Iceberg Good Till Date SWX	O2	900	100	101.0000								
Mid-Point Order Book (MPOB)	Bid					Ask							
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.5000	10000 1'025'000	-	O6	Good Till Date SWML	Manual 78	Indicative 3000 R
							102.2500	5000 511'250	1000 102'250	O3	Good for Day SWMB	-	5 5000 P
	4000 P	Indicative Automated 81	Block Good for Day SWML	O4	10000 1'017'500	50000 5'087'500	101.7500						
							101.5000	6000 609'000	-	O8	Block Good Till Date SWML	Indicative Automated 73	8 8000 R
	7000 R	Binding -	Block Good for Day SWML	O7	5000 506'250	7500 759'375	101.2500						
6000 R	-	Normal Good for Day SWM	O5		20000 2'020'000	101.0000							
<b>Result</b>	No firm-up phase is initiated between O4 and O8 because the quantity of O8 does not meet the Minimum Execution Quantity defined for O4.												
<b>Comment</b>	Both indicative SwissAtMid Block Orders remain in the SwissAtMid order book. If the Minimum Execution Quantity is provided it must be at least at or above Block Order Value threshold.												

Scenario 6		No firm-up phase initiated due to Block Order Value threshold											
Conditions		Mid-Point Price = 101.50											
Central Limit Order Book (CLOB)	Bid					Ask							
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty	Price (GL)	Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity		
						102.2500	5000	1000	O3	Good for Day SWMB	5000 P		
						102.0000	2000	-	O1	Good for Day SWX	1 1000 P		
2 2000 R	Iceberg Good Till Date SWX	O2	900	100	101.0000								
Mid-Point Order Book (MPOB)	Bid					Ask							
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.5000	10000 1'025'000	-	O6	Good Till Date SWML	Manual 78	3 3000 R
							102.2500	5000 511'250	1000 102'250	O3	Good for Day SWMB	-	5 5000 P
	4 4000 P	Indicative Automated 81	Block Good for Day SWML	O4	-	50000 5'087'500	101.7500						8 8000 R
							101.5000	4000 406'000	-	O8	Good Till Date SWM	-	
	7 7000 R	Binding -	Block Good for Day SWML	O7	5000 506'250	7500 759'375	101.2500						
6 6000 R	-	Normal Good for Day SWM	O5	-	20000 2'020'000	101.0000							
<b>Result</b>		No firm-up phase is initiated between O4 and O8 because the value of O8 does not meet the Block Order Value threshold required for SwissAtMid Block Order trades.											
<b>Comment</b>		Each trade resulting from a SwissAtMid Block Order must meet the Block Order Value threshold defined by the Exchange in the reference data.											

Scenario 7		No firm-up phase initiated due to Trading Interruption in CLOB												
Conditions		Reference Price = 100.00 Mid-Point Price = 101.50 Stop Trading Range / Duration = 1.5% for 5 Minutes												
Central Limit Order Book (CLOB)	Bid						Ask							
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty	Price (GL)	Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity			
						102.2500	5000	1000	O3	Normal Good for Day SWMB	5 5000 P			
	2 2000 R	Iceberg Good Till Date SWX	O2	900	100	101.5000	2000	-	O1	Normal Good for Day SWX	1 1000 P			
Mid-Point Order Book (MPOB)	Bid						Ask							
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity	
							102.5000	10000 1'025'000	-	O6	Block Good Till Date SWML	Indicative Manual 78	3 3000 R	
							102.2500	5000 511'250	1000 102'250	O3	Normal Good for Day SWMB	-	5 5000 P	
	4 4000 P	Indicative Automated 81	Block Good for Day SWML	O4	5000 508'750	50000 5'087'500	101.7500							
							101.5000	6000 609'000	-	O8	Block Good Till Date SWML	Indicative Automated 73	8 8000 R	
	7 7000 R	Binding -	Block Good for Day SWML	O7	5000 506'250	7500 759'375	101.2500							
6 6000 R	-	Normal Good for Day SWM	O5		20000 - 2'020'000	101.0000								
Result	Due to a Stop Trading in the CLOB of the respective security, no firm-up phase is initiated between O4 and O8 in SwissAtMid for the duration of the Stop Trading.													
Comment	When continuous trading in the CLOB is resumed, a firm-up request is sent to O4 and O8													

Scenario 8		No firm-up phase initiated due to Immediate Order											
Conditions		Mid-Point Price = 101.50											
Central Limit Order Book (CLOB)	Bid					Ask							
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty	Price (GL)	Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity		
						102.2500	5000	1000	O3	Good for Day SWMB	5000 P		
						102.0000	2000	-	O1	Good for Day SWX	1000 P		
2 2000 R	Iceberg Good Till Date SWX	O2	900	100	101.0000								
Mid-Point Order Book (MPOB)	Bid					Ask							
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.5000	10000 1'025'000	-	O6	Good Till Date SWML	Manual 78	3000 R
							102.2500	5000 511'250	1000 102'250	O3	Good for Day SWMB	-	5000 P
	4 4000 P	Indicative Automated 81	Block Good for Day SWML	O4	-	50000 5'087'500	101.7500						
							101.5000	5000 507'500	-	O8	Normal IoC SWM	-	8000 R
	7 7000 R	Binding -	Block Good for Day SWML	O7	5000 506'250	7500 759'375	101.2500						
6 6000 R	-	Normal Good for Day SWM	O5	-	20000 2'020'000	101.0000							
<b>Result</b>		No firm-up phase is initiated between O4 and O8 because the validity of the Normal order is Immediate-or-Cancel.											
<b>Comment</b>		Immediate orders do not trigger firm-up phases of SwissAtMid Block Orders.											

### C.3 SwissAtMid Block Orders – Priority for Firm-up Phase

Scenario 9		Firm-up phase with time priority											
Conditions		Mid-Point Price = 101.50											
Central Limit Order Book (CLOB)	Bid					Ask							
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty	Price (GL)	Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity		
						102.2500	5000	1000	O3	Good for Day SWMB	5000 P		
						102.0000	2000	-	O1	Good for Day SWX	1000 P		
2000 R	Iceberg Good Till Date SWX	O2	900	100	101.0000								
Mid-Point Order Book (MPOB)	Bid					Ask							
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.5000	10000 1'025'000	-	O6	Good Till Date SWML	Indicative 78	3000 R
							102.2500	5000 511'250	1000 102'250	O3	Good for Day SWMB	-	5000 P
	4000 P	Indicative Automated 81	Block Good for Day SWML	O9 F1	5000 507'500	10000 1'015'000	101.5000	7500 761'250	5000 507'500	O8	Good for Day SWML	Indicative Manual 79	9000 R
							101.5000	7500 761'250	-	O4 F1	Block Good Till Date SWML	Indicative Automated 73	8000 R
	7000 R	Binding -	Block Good for Day SWML	O7	5000 506'250	7500 759'375	101.2500						
6000 R	-	Normal Good for Day SWM	O5	-	20000 2'020'000	101.0000							
<b>Result</b>		Firm-up phase is initiated with O9 and O4 due to the better time priority of O4 compared to O8											
<b>Comment</b>		In SwissAtMid firm-up phases are initiated and orders are executed according to size/time priority. Price priority is not relevant because execution is always done at the midpoint of the CLOB.											

Scenario 10		Firm-up phase with size priority											
Conditions		Mid-Point Price = 101.50											
Central Limit Order Book (CLOB)	Bid					Ask							
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty	Price (GL)	Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity		
						102.2500	5000	1000	O3	Normal Good for Day SWMB	5 5000 P		
						102.0000	2000	-	O1	Normal Good for Day SWX	1 1000 P		
2 2000 R	Iceberg Good Till Date SWX	O2	900	100	101.0000								
Mid-Point Order Book (MPOB)	Bid					Ask							
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.5000	10000 1'025'000	-	O6	Block Good Till Date SWML	Indicative Manual 78	3 3000 R
							102.2500	5000 511'250	1000 102'250	O3	Normal Good for Day SWMB	-	5 5000 P
	4 4000 P	Indicative Automated 81	Block Good for Day SWML	O9 F1	5000 507'500	10000 1'015'000	101.5000	7500 761'250	5000 507'500	O4	Block Good for Day SWML	Indicative Manual 79	9 9000 R
							101.5000	10000 1'015'000	-	O8 F1	Block Good Till Date SWML	Indicative Automated 73	8 8000 R
	7 7000 R	Binding -	Block Good for Day SWML	O7	5000 506'250	7500 759'375	101.2500						
	6 6000 R	-	Normal Good for Day SWM	O5		20000 - 2'020'000	101.0000						
<b>Result</b>		Firm-up phase is initiated with O9 and O8 due to the better size priority of O8 compared to O4											
<b>Comment</b>		In SwissAtMid firm-up phases are initiated and orders are executed according to size/time priority. Price priority is not relevant because execution is always done at the midpoint of the CLOB.											

Scenario 11		Firm-up phase multiple SwissAtMid Block Orders											
Conditions		Mid-Point Price = 101.50											
Central Limit Order Book (CLOB)	Bid					Price (GL)	Ask			Entity Party Capacity			
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	Type Validity Routing				
						102.2500	5000	1000	O3	Normal	5		
						102.0000	2000	-	O1	Good for Day SWMB SWX	1000		
2	Iceberg												
2000	Good Till Date	O2	900	100	101.0000								
R	SWX												
Mid-Point Order Book (MPOB)	Bid					Price	Ask			Entity Party Capacity			
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value		Quantity Value Orig Qty	Quantity Value Orig Qty	MEQ Value		ID FU	Type Validity Routing	Condition Indicator Scoring
						102.5000	10000	-	O6	Block	Indicative	3	
						102.2500	5000	1000	O3	Good for Day SWMB	-	5000	
	4	Indicative	Block	O10	5000	50000	10000	5000	O4	Block	Indicative	9	
	4000	Automated	Good for Day	F1	507'500	5'075'000	101.5000	10'15'000	507'500	F1	Good for Day SWML	Manual	9000
	P	81	SWML								79	79	R
						101.5000	10000	-	O8	Block	Binding	8	
						101.5000	8000	-	O9	Good for Day SWM	-	6000	
	7	Binding	Block	O7	5000	7500	101.2500	10'15'000	-		Good Till Date SWML	-	8000
7000	-	Good for Day		506'250	759'375							R	
R	-	SWML											
6		Normal	O5	-	20000	101.0000	8000	-		Normal	-	6	
6000	-	Good for Day					812'000	-		Good for Day	-	6000	
R	-	SWM								SWM	-	P	
Result	Firm-up phase is initiated with O10 and O4. The quantity of O10 can execute against O4, O8 and O9; however, only O4 and O10 participate in the firm-up phase as only they are indicative orders. O4 has Manual Order Indicator set to true and therefore receives the firm-up request before O10 who is an automated indicative SwissAtMid Block Order who will receive the firm-up request only after O4 has firmed-up. O9 and O8 are available for execution in the same matching cycle as O10 and O4, once their firm-up phase has concluded.												
Comment	Only indicative SwissAtMid Block Orders are included in a firm-up phase. Binding SwissAtMid Block Orders and Normal SwissAtMid Orders are executable at any moment.												

## C.4 SwissAtMid Block Orders – Firm-up Phase without Executions

Scenario 12		Firm-up Phase between automatic Block Orders without execution due to missing firm-up											
Conditions		Mid-Point Price = 101.50											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
4	4000	Indicative Automatic 81	Block Good till Date SWML	O4	5000 507'500	50000 5'075'000	101.5000	10000 1'015'000	5000 507'500	O3	Block Good for Day SWML	Indicative Automatic 79	3 3000 R
2	2000	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500						
R													
Result		A firm-up phase 1 is initiated with O3 and O4.											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
4	4000	Firmed-up Automatic 81	Block Good till Date SWML	O4 F1	5000 507'500	50000 5'075'000	101.5000						
2	2000	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500						
R													
Result		O4 has sent a firmed-up SwissAtMid Block Order whereas O3 has not firmed-up his order during the firm-up phase. As a consequence there is no execution in SwissAtMid. O4 remains in the order book as a firmed-up SwissAtMid Block Order.											
Comment		O3 and O4 are both automatic SwissAtMid Block Orders and therefore they trigger the firm-up request at the same time. Indicative SwissAtMid Block Orders which trigger a firm-up request are deleted from the order book independent from their order validity.											



Scenario 13		Firm-up Phase between Block Orders without execution due change of Mid-Point Price												
Conditions		Mid-Point Price = 101.50												
Mid-Point Order Book (MPOB)	Bid						Ask						Entity Party Capacity	
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring		
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-		1 1000 P
	4 4000 P	Indicative Automatic 81	Block Good till Date SWML	O4	5000 507'500	50000 5'075'000	101.5000	10000 1'015'000	5000 507'500	O3	Block Good for Day SWML	Indicative Manual 79		3 3000 R
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500								
Result		A firm-up phase 1 is initiated with O3 and O4.												
Conditions		Mid-Point Price Changes to 102.00												
Mid-Point Order Book (MPOB)	Bid						Ask						Entity Party Capacity	
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring		
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-		1 1000 P
	4 4000 P	Indicative Automatic 82	Block Good till Date SWML	O4 F1	5000 508'750	50000 5'087'500	101.7500	10000 1'015'000	5000 507'500	O3 F1	Block IoC SWML	Indicative Manual 79		3 3000 R
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500								
Result		O3 and O4 have both firmed-up their indicative SwissAtMid Block Order during the firm-up phase. No execution due to change of Mid-Point Price during firm-up phase. O3 is deleted after firm-up phase because the firmed-up SwissAtMid Block Order has been submitted with validity IOC.												
Comment		O4 has improved the price during the firm-up phase and therefore the performance score increased. O1 is in limit but no execution can take place.												

## C.5 SwissAtMid Block Orders – Matching Scenarios

Scenario 14		Manual Block Orders execute against each other											
Conditions		Mid-Point Price = 101.50											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
	4 4000 P	Indicative Manual 81	Block Good till Date SWML	O4	5000 507'500	50000 5'075'000	101.5000	10000 1'015'000	5000 507'500	O3	Block Good for Day SWML	Indicative Manual 79	3 3000 R
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							
Result		A firm-up phase 1 is initiated with O3 and O4.											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
	4 4000 P	Firmed-up Manual 81	Block Good till Date SWML	O4 F1	5000 507'500	50000 5'087'500	101.5000	10000 1'015'000	5000 507'500	O3 F1	Block Good for Day SWML	Firmed-up Manual 79	3 3000 R
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							
Result		Both indicative SwissAtMid Block Orders sent their firmed-up SwissAtMid Block Order. A trade is executed of 10000 @ 101.50.											
Comment		O3 and O4 are both manual SwissAtMid Block Orders and therefore they receive the firm-up request at the same time.											

Scenario 15		Binding Block Orders execute against each other											
Conditions		Mid-Point Price = 101.50											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
	4 4000 P	Binding -	Block Good till Date SWML	O4	5000 507'500	50000 5'075'000	101.5000	10000 1'015'000	5000 507'500	O3	Block Good for Day SWML	Binding -	3 3000 R
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							
Result		A trade is executed of 10000 @ 101.50											
Comment		O3 and O4 are both binding SwissAtMid Block Orders and therefore execute immediately.											

Scenario 16		Binding SwissAtMid Block Order executes against a Firmed-up SwissAtMid Block Order from another firm-up phase											
Conditions		Mid-Point Price = 101.50											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
5 5000 P	Binding -	Block Good for Day SWML	O3	-	40000 4'070'000	101.7500							
4 4000 P	Indicative Manual 81	Block Good till Date SWML	O4 F1	5000 508'750	50000 5'087'500	101.5000	40000 4'060'000	5000 507'500	O5 F1	Block Good for Day SWML	Indicative Manual 79	3 3000 R	
						101.5000	20000 2'030'000	-	O6	Block Good for Day SWML	Indicative Automatic 90	6 6000 R	
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							
<b>Result</b>		A firm-up phase 1 is running between O5 and O4. O3 was not considered because of lower size priority compared to O4 and because the quantity of O5 is not sufficient to execute against O3 and O4. O6 triggers an additional firm-up phase 2 with O3 in parallel to the already running firm-up phase 1.											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
5 5000 P	Binding -	Block Good for Day SWML	O3	-	40000 4'070'000	101.7500							
						101.5000	40000 4'060'000	5000 507'500	O5 F1	Block Good for Day SWML	Firmed-up Manual 79	3 3000 R	
						101.5000	20000 2'030'000	-	O6	Block Good for Day SWML	Indicative Automatic 90	6 6000 R	
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							
<b>Result</b>		O4 does not firm-up the indicative SwissAtMid Block Order during the firm-up phase 1. O3 has firm-ed-up the indicative SwissAtMid Block Order with validity Good for Day. O6 is deleted from the order book with the firm-up request and is not firm-ed-up. A trade is executed of 40000 @ 101.50 between O3 and O5.											
<b>Comment</b>		Binding SwissAtMid Block Orders and Firm-ed-up SwissAtMid Block Orders are executable without further firm-up phase.											

Scenario 17		Binding SwissAtMid Block Order can only participate in one firm-up phase											
Conditions		Mid-Point Price = 101.50											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
	4 4000 P	Binding -	Block Good till Date SWML	O4 F1	5000 508'750	50000 5'087'500	101.5000	40000 4'060'000	5000 507'500	O3 F1	Block Good for Day SWML	Indicative Manual 79	3 3000 R
							101.5000	10000 1'015'000	-	O5	Block Good for Day SWML	Indicative Automatic 90	6 6000 R
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							
Result		A firm-up phase 1 is running between O3 and O4. O4 cannot trigger an additional firm-up phase 2 with O5 even though the Size of O4 would be sufficient to execute quantity of O3 and O5.											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
	4 4000 P	Binding -	Block Good till Date SWML	O4	5000 508'750	50000 5'087'500	101.5000						
							101.5000	10000 1'015'000	-	O5	Block Good for Day SWML	Indicative Automatic 90	6 6000 R
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							
Result		O3 does not firm-up the indicative SwissAtMid Block Order during the firm-up phase 1 and is deleted from order book. A firm-up phase is initiated between O4 and O5.											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Volume	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Volume	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 511'250	1000 102'250	O1	Normal Good for Day SWMB	-	1 1000 P
	4 4000 P	Binding -	Block Good till Date SWML	O4 F2	5000 508'750	50000 5'087'500	101.5000						
							101.5000	10000 1'015'000	-	O5 F2	Block FoK SWML	Firmed-up Automatic 91	6 6000 R
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 763'125	101.2500							
Result		O5 has firmed-up the indicative SwissAtMid Block order during the firm-up phase. A trade is executed of 10000 @ 101.50 between O4 and O5.											
Comment		Binding SwissAtMid Block Orders can only trigger one firm-up phase in the order book.											

**Scenario 18** **Indicative SwissAtMid Block Order can only be involved in one firm-up phase and newly entered indicative SwissAtMid Block Order is not included in running firm-up phase**

**Conditions** Mid-Point Price = 101.50

Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
4 4000 P	Indicative Automatic 71	Block Good till Date SWML	O4 F1	5000 508'750	50000 5'087'500	101.5000	70000 7'105'000	5000 507'500	O3 F1	Block Good for Day SWML	Indicative Manual 79	3 3000 R	
						101.5000	10000 1'015'000	-	O5	Block Good for Day SWML	Indicative Automatic 90	6 6000 R	
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							

**Result**  
A firm-up phase 1 is running between O3 and O4.  
O4 cannot trigger an additional firm-up phase 2 with O5 even though the Size of O4 would be sufficient to execute quantity of O3 and O5.  
O5 cannot be included in the running firm-up phase 1 even though the size on the contra side would be sufficient.

Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
4 4000 P	Firmed-up Manual 72	Block Good till Date SWML	O4 F1	5000 507'500	55000 5'582'500	101.5000							
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 507'500	7500 761'250	101.5000	10000 1'015'000	-	O5	Block Good for Day SWML	Firmed-up Automatic 90	6 6000 R	
						101.2500	60000 6'075'000	5000 506'250	O3 F1	Block Good for Day SWML	Firmed-up Manual 86	3 3000 R	

**Result**  
O3 and O4 firm-up the SwissAtMid Block Order during firm-up phase 1.  
O3 has reduced the quantity during firm-up phase and therefore his score is reduced but at the same time the price has been improved and the score is increased. Additionally the score is increased because of the response to the firm-up request.  
O2 has amended the limit of the Binding SwissAtMid Block Order and trigger a firm-up phase 2 with O5 because the quantity of O5 can partially be executed by the quantity of O2.  
A trade is executed of 55000 @ 101.50 between O4 and O3.  
A trade is executed of 7500 @ 101.50 between O5 and O2.

**Comment**  
Performance Score is calculated based on Quality of Response, Quality of Size, Quality of Price and Match Break.  
The quantity related part of the O3 order score gets a penalty, but the price, response and match break part of the score get the full rating.

Scenario 19		Indicative SwissAtMid Block Orders changing size/time priority during firm-up phase											
Conditions		Mid-Point Price = 101.50											
	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
Mid-Point Order Book (MPOB)							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
	4 4000 P	Indicative Automatic 71	Block Good till Date SWML	O6	6000 609'000	50000 5'087'500	101.5000	30000 3'045'000	5000 507'500	O4	Block Good for Day SWML	Indicative Manual 79	3 3000 R
							101.5000	10000 1'015'000	-	O3	Block Good for Day SWML	Indicative Automatic 90	6 6000 R
							101.2500	10000 1'012'500	-	O5	Block Good for Day SWML	Indicative Automatic 88	5 5000 R
	2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500						

**Result** A firm-up phase 1 is initiated by O4 with O3, O5 and O6.  
O5 has size priority compared to O3 and O6.  
O3 has time priority compared to O6 and O5.

	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
Mid-Point Order Book (MPOB)							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
	4 4000 P	Firmed-up Automatic 72	Block Good till Date SWML	O6 F1	6000 609'000	30000 3'045'000	101.5000	10000 1'015'000	5000 507'500	O4 F1	Block Good for Day SWML	Firmed-up Manual 79	3 3000 R
							101.5000	10000 1'015'000	-	O3 F1	Block Good for Day SWML	Firmed-up Automatic 90	6 6000 R
							101.2500	20000 2'025'000	-	O5 F1	Block Good for Day SWML	Firmed-up Automatic 88	5 5000 R
	2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500						

**Result** All indicative SwissAtMid Block Order have submitted a firmed-up order during the firm-up phase 1. O5 is a manual SwissAtMid Block Order and has received the firm-up request before the automatic SwissAtMid Block Orders O3, O6 and O4; therefore O5 has the highest time priority. O3 has submitted the firmed-up SwissAtMid Block Order before O6 and therefore has better time priority compared to O6. O6 has submitted the firmed-up SwissAtMid Block Order after O3 but has increased the quantity and therefore has higher size priority compared to O3. O4 has reduced the quantity when submitting the firmed-up SwissAtMid Block Order. A trade is executed of 20000 @ 101.50 between O6 and O5. A trade is executed of 10000 @ 101.50 between O6 and O3. O3 remains in the order book until expiry and can immediately execute or trigger a firm-up phase with a new indicative SwissAtMid Block Order.

**Comment** The size/time priority relevant for the execution in SwissAtMid is when the indicative SwissAtMid Block Order has been firmed-up. Therefore during the firm-up phase the size/time priority can change.

**Scenario 20** No execution after firm-up of indicative SwissAtMid Block Order due to matching conditions not being met

Conditions		Mid-Point Price = 101.50										
Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	Bid				Price	Ask			Condition Indicator Scoring	Entity Party Capacity
			ID FU	MEQ Value	Quantity Value Orig Qty	Quantity Value Orig Qty		MEQ Value	ID FU	Type Validity Routing		
						102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
4 4000 P	Indicative Automatic 71	Block Good till Date SWML	O4	30000 3'045'000	50000 5'075'000	101.5000	30000 3'045'000	5000 507'500	O5	Block Good for Day SWML	Indicative Manual 70	3 3000 R
						101.5000	20000 2'030'000	-	O3	Block Good for Day SWML	Indicative Automatic 90	6 6000 R
						101.2500	5000 506'250	-	O6	Block Good for Day SWML	Binding - -	5 5000 R
2 2000 R	Binding - -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500						

**Result** A firm-up phase 1 is initiated by O4 with O3 and O5.

Result		A firm-up phase 1 is initiated by O4 with O3 and O5.										
Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	Bid				Price	Ask			Condition Indicator Scoring	Entity Party Capacity
			ID FU	MEQ Value	Quantity Value Orig Qty	Quantity Value Orig Qty		MEQ Value	ID FU	Type Validity Routing		
						102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
						101.7500	<del>20000 2'035'000</del>	<del>5000 507'500</del>	<del>O5 F1</del>	<del>Block Good for Day SWML</del>	<del>Indicative Manual 69</del>	<del>3 3000 R</del>
4 4000 P	Firmed-up Automatic 72	Block IoC SWML	O4 F1	30000 3'045'000	50000 5'075'000	101.5000						
						101.5000	20000 2'030'000	-	O3 F1	Block Good for Day SWML	Firmed-up Automatic 92	6 6000 R
						101.2500	5000 506'250	-	O6	Block Good for Day SWML	Binding - -	5 5000 R
2 2000 R	Binding - -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500						

**Result** The manual indicative SwissAtMid Block Order O5 has received the firm-up request before the automatic indicative SwissAtMid Block Orders O3 and O4. O5 has reduced the size and changed the price with the firmed-up SwissAtMid Block order, the Performance Score has been reduced, the participant is blocked from SwissAtMid Block Order usage due to a breach of the ISIN Performance Score threshold and therefore O5 is deleted from the order book. O3 has submitted a firmed-up SwissAtMid Block Order. O6 is a Binding SwissAtMid Block Order and executable without firm-up. No trade can be executed because the Minimum Execution Quantity of O4 cannot be met. O4 expires after the firm-up phase because it has been firmed-up with validity IoC. O3 and O6 remain in the order book and are executable.

**Comment** SwissAtMid Block Orders do not have a guarantee for execution even when they are firmed-up.

Scenario 21		Match Break of a firm-up phase and expiry of firm-up SwissAtMid Block Order due to order validity											
Conditions		Mid-Point Price = 101.50											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
4 4000 P	Indicative Manual 71	Block Good till Date SWML	O4	30000 3'045'000	50000 5'075'000	101.5000	30000 3'045'000	-	O3	Block Good for Day SWML	Indicative Manual 75	3 3000 R	
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							
Result		A firm-up phase 1 is initiated by O4 with O5.											
Mid-Point Order Book (MPOB)	Bid						Ask						
	Entity Party Capacity	Condition Indicator Scoring	Type Validity Routing	ID FU	MEQ Value	Quantity Value Orig Qty	Price	Quantity Value Orig Qty	MEQ Value	ID FU	Type Validity Routing	Condition Indicator Scoring	Entity Party Capacity
							102.0000	5000 510'000	1000 102'000	O1	Normal Good for Day SWMB	-	1 1000 P
4 4000 P	Firmed-up Manual 72	Block FoK SWML	O4 F1	30000 3'045'000	50000 5'075'000	101.5000	4000 406'000	-	O3 F1	Block Good for Day SWML	Firmed-up Manual 73	3 3000 R	
							101.5000	30000 3'045'000	-	O5	Block Good for Day SWML	Indicative Automatic 90	6 6000 R
2 2000 R	Binding -	Block Good for Day SWML	O2	5000 506'250	7500 759'375	101.2500							
Result		<p>The manual indicative SwissAtMid Block Orders O3 and O4 have received the firm-up request at the same time.</p> <p>O3 has reduced the size with the firm-up SwissAtMid Block and since the Block Order Value threshold is no longer met, the firm-up SwissAtMid Block Order is rejected. As a consequence the Performance Score of O3 is reduced due to the reduction of the size and because it lead to a Match Break.</p> <p>O4 has submitted a firm-up SwissAtMid Block order but can not execute due to the Match Break of O3. Since O4 has been firm-up with order validity FoK it expires at the end of the firm-up phase 1 and does not trigger another firm-up phase with the newly available indicative SwissAtMid Block O5.</p>											
Comment		<p>Firmed-up SwissAtMid Block Orders with an immediate order validity (IoC / FoK) are valid for the duration of the firm-up phase and expire at the end of the firm-up phase if not executed.</p> <p>Binding SwissAtMid Block Orders are not valid for the duration of a firm-up phase but behave like Normal SwissAtMid Block Orders with immediate order validity.</p>											



## Appendix D Matching Scenarios for Stop Trading After Non-Opening in the QDM and PVM

The two matching scenarios below provide examples of how the new Stop Trading after Non-Opening behavior applies with SMR10. Please note that the following conditions apply for all matching scenarios:

The order/quote marked in **red** is the entering order.

The order/quote marked in **orange** is being amended or deleted.

### D.1 Quote Driven Market Model

Example below with Sponsored Foreign Shares

<b>Scenario 1</b>	No quotes being present in the order book and no trades occur between the orders in the order book								
<b>Conditions</b>	Quote Driven Market Model Stop Trading no Quote = 5 minutes Reference Price = CHF 102.00								
<b>QDM in Continuous Trading</b>	<b>Bid</b>					<b>Ask</b>			
	<b>Entity Party Capacity</b>	<b>Type Validity Routing</b>	<b>ID</b>	<b>Quantity Orig Qty</b>	<b>Price</b>	<b>Quantity Orig Qty</b>	<b>ID</b>	<b>Type Validity Routing</b>	<b>Entity Party Capacity</b>
					110.00	100	O2	Normal Day SWX	8 8000 P
	9 9000 P	Normal Day SWX	O1	100	Market				
<b>Result</b>	O2 enters the order book and triggers "Stop Trading no Quote" because there are no quotes on the opposite side of the potential match.								
<b>QDM in Stop Trading</b>	<b>Bid</b>					<b>Ask</b>			
	<b>Entity Party Capacity</b>	<b>Type Validity Routing</b>	<b>ID</b>	<b>Quantity Orig Qty</b>	<b>Price</b>	<b>Quantity Orig Qty</b>	<b>ID</b>	<b>Type Validity Routing</b>	<b>Entity Party Capacity</b>
					110.00	100	O2	Normal Day SWX	8 8000 P
	9 9000 P	Normal Day SWX	O1	100	Market				
<b>Result</b>	During the "Stop Trading no Quote" O2 is deleted and causes "Stop Trading no Quote" to expire. The order book changes to "Non-Opening" because there is a market order that cannot be matched.								
<b>QDM in Non-Opening</b>	<b>Bid</b>					<b>Ask</b>			
	<b>Entity Party Capacity</b>	<b>Type Validity Routing</b>	<b>ID</b>	<b>Quantity Orig Qty</b>	<b>Price</b>	<b>Quantity Orig Qty</b>	<b>ID</b>	<b>Type Validity Routing</b>	<b>Entity Party Capacity</b>
					110.00	100	O2	Normal Day SWX	8 8000 P
	9 9000 P	Normal Day SWX	O1	100	Market				
<b>Result</b>	During the "Non-Opening", O2 is re-entered triggering the "Non-Opening" to expire. The order book changes to "Stop Trading" because there are no quotes on the opposite side of the potential match.								

Scenario 1 continued

QDM in Stop Trading	Bid					Ask			
	Entity Party Capacity	Type Validity Routing	ID	Quantity Orig Qty	Price	Quantity Orig Qty	ID	Type Validity Routing	Entity Party Capacity
					110.00	100	O2	Normal Day SWX	8 8000 P
9 9000 P	Normal Day SWX	O1	100	Market					
<b>Result</b>	The order book is in "Stop Trading no Quote" condition								
<b>Comment</b>	No executions can take place as the book is in a "Stop Trading no Quote"								

## D.2 Price Validation Market Model for Structured Products

**Scenario 2** No quotes being present in the order book and no trades occur between the orders in the order book

**Conditions** Price Validation Model  
Stop Trading no Quote = 30 seconds  
Reference Price = CHF 102.00

QDM in Continuous Trading	Bid					Ask			
	Entity Party Capacity	Type Validity Routing	ID	Quantity Orig Qty	Price	Quantity Orig Qty	ID	Type Validity Routing	Entity Party Capacity
					102.00	50	Q1	Quote Day SWX	7 7000 P
9 9000 P	Normal Day SWX	O1	100	Market					

**Result** Q1 enters the order book and triggers "Price Validation interruption" because there is a potential match between the quote and the buy order.

QDM in Price Validation	Bid					Ask			
	Entity Party Capacity	Type Validity Routing	ID	Quantity Orig Qty	Price	Quantity Orig Qty	ID	Type Validity Routing	Entity Party Capacity
					110.00	100	O2	Order Day SWX	8 8000 P
					102.00	50	Q1	Quote Day SWX	7 7000 P
9 9000 P	Normal Day SWX	O1	100	Market					

**Result** During the "Price Validation Interruption" O2 enters the order book and Q1 is deleted triggering a "Stop Trading no Quote" condition. The order book changes to "Stop Trading no Quote" because there are no quotes in the order book but there is a potential match.

**Scenario 2 continued**

QDM in Stop Trading	Bid					Ask			
	Entity Party Capacity	Type Validity Routing	ID	Quantity Orig Qty	Price	Quantity Orig Qty	ID	Type Validity Routing	Entity Party Capacity
					110.00	100	O2	Order Day	8 8000 P
	9 9000 P	Normal Day SWX	O1	100	Market				

**Result** During the "Stop Trading no Quote" O2 is deleted and causes "Stop Trading no Quote" to expire. The order book changes to "Non-Opening" because there is a market order that cannot be matched.

QDM in Non-Opening	Bid					Ask			
	Entity Party Capacity	Type Validity Routing	ID	Quantity Orig Qty	Price	Quantity Orig Qty	ID	Type Validity Routing	Entity Party Capacity
					110.00	100	O2	Normal Day SWX	8 8000 P
	9 9000 P	Normal Day SWX	O1	100	Market				

**Result** During the "Non-Opening", O2 is re-entered triggering the "Non-Opening" condition to expire. The order book changes to "Stop Trading" because there are no quotes on the opposite side of the potential match.

QDM in Stop Trading	Bid					Ask			
	Entity Party Capacity	Type Validity Routing	ID	Quantity Orig Qty	Price	Quantity Orig Qty	ID	Type Validity Routing	Entity Party Capacity
					110.00	100	O2	Normal Day SWX	8 8000 P
	9 9000 P	Normal Day SWX	O1	100	Market				

**Result** The order book is in "Stop Trading no Quote" condition

**Comment** No executions can take place as the book is in a "Stop Trading no Quote" condition.

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