



Swiss Exchange

SWXess Maintenance Release 5.1 (SMR5.1) Participant Readiness of 11 November 2015



Table of Content

1. Introduction	4
1.1. Purpose and Scope	4
1.2. Definitions and Abbreviations	4
1.3. References	4
1.4. Contacts	5
2. Summary and Overview	6
3. Functional Changes	7
3.1. On Order Book Trading	7
3.1.1. Self-Match Prevention (SMP)	7
3.1.2. Reference Price Adjustment	9
3.2. Trade and Transaction Reporting (TTR)	11
3.2.1. Trade and Transaction Reporting (TTR) GUI	11
3.3. Post-Trade Processing	13
3.3.1. Settlement Cycle T+1 for Rights and Shareholder Options	13
3.3.2. E-Mail recipients for Cancellation notifications	14
3.3.3. Billing	15
3.4. Market- & Reference data	17
3.4.1. Designation of Trading Segments	17
3.5. Other Service Offerings	18
3.5.1. Member Section	18
3.5.2. SIX Swiss Exchange Liquidnet Service (SLS)	18
3.5.3. Sponsored Access (SA)	19
3.5.4. Bilateral Trading Platform for Structured Products (XBTR)	19
4. Technical Changes	21
4.1. Technical Release Notes	21
4.2. Manuals and Specifications	21
5. Regulatory Changes	22
6. Migration	24
6.1. Business Migration	24
6.1.1. Transactional Data	24
6.1.2. Security and Segment Reference Data	24
6.1.3. Participant Reference Data	27
6.1.4. Other Migration Aspects	28
6.2. Technical Migration	28
7. Rollout	29
8. Testing	30
9. Document History	31
10. Annex	32
10.1. Scenarios: Party ID	32
10.2. Scenario: Non-Trading Period	34
10.3. Scenario: Trading Interfaces	34
10.4. Scenarios: Stop Trading	35
10.5. Scenarios: Iceberg Order	36
10.6. Scenarios: Immediate Orders (FoK and IoC)	38

1. Introduction

1.1. Purpose and Scope

This document provides all business relevant information for SWXess Maintenance Release 5.1 (SMR5.1).

1.2. Definitions and Abbreviations

Term / Abbreviation	Definition
FIX	Financial Information eXchange Protocol
GUI	Graphical User Interface
IMI	ITCH Market Data Interface
MDI	Market Data Interface
OBM	On Book Matcher
OTI	OUCH Trading Interface
QTI	Quote Trading Interface
PTP	Post Trade Processing
RDI	Reference Data Interface
SCAP	SWXess Common Access Portal
SLS	SIX Swiss Exchange Liquidnet Service (non-displayed liquidity service)
SMR5.1	SWXess Maintenance Release 5.1
SMP	Self-Match Prevention
SSP-X	SIX Structured Products Exchange
SSX	SIX Swiss Exchange
STI	Standard Trading Interface
SWXess	Name of the SIX Swiss Exchange trading platform
TRI	Transaction Report Interface
TRR	Trade Reconciliation Report
XBTR	Bilateral Trading Platform for Structured Products
X-stream INET	Name of NASDAQ OMX trading system

1.3. References

Document	Link
SIX Swiss Exchange Messages	http://www.six-swiss-exchange.com/news/sse_messages/2015_de.html
Rule Book and Directives	SSX http://www.six-swiss-exchange.com/participants/regulation_en.html SSP-X http://www.six-structured-products.com/en/about-us/exchange-trading/trading-rules
Trading and Reporting Guides	http://www.six-swiss-exchange.com/participants/regulation/trading_guides_en.html
Forms	http://www.six-swiss-exchange.com/participants/participation/forms_en.html
SWXess Maintenance Releases	http://www.six-swiss-exchange.com/participants/participation/smr_en.html
MSC Messages	https://www.six-swiss-exchange.com/member_section/it/messages.html
Interface Specifications, Manuals and Guides	https://www.six-swiss-exchange.com/member_section/it/manuals.html
Technical Release Notes	https://www.six-swiss-exchange.com/member_section/it/release_docs.html

1.4. Contacts

For business related questions, please contact Market Operations:

Topic	Team	Phone	E-Mail
Participant Configuration Reporting Clearing & Settlement Billing	Member Services	+41 58 399 2473	member.services@six-group.com
Mistrades & Cancellations Emergency Deletions Suspensions	Exchange Operations	+41 58 399 2475	helpdesk.exc@six-group.com
Instrument Reference Data	Static Data Operations	+41 58 399 2490	zulassung@six-group.com

Please contact your Local Support Centre for technical questions:

Location	Phone	Fax	E-Mail
Zurich	+41 58 399 2400	+41 58 499 2400	lsz@six-group.com
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London	+41 20 7864 4364	+41 20 7864 4333	lsl@six-group.com

Please do not hesitate to contact your Account Manager for specific concerns and interests:

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Find further contact information on the [Contact & Support](#) pages of SIX Swiss Exchange.

2. Summary and Overview

SIX Swiss Exchange is introducing a further upgrade of its SWXess trading platform as part of its ongoing improvement efforts. SWXess Maintenance Release 5.1 (SMR5.1) is an **optional upgrade with mandatory configuration changes** and will mainly introduce the «Self-Match Prevention» functionality as well as optimizations in Post-Trade Processing.

This section gives an overview of the SWXess functional changes with SMR5.1:

Area	Change	Type of Change
On Order Book Trading	New service «Self-Match Prevention» available via STI and OTI	Optional
	New methodology for Reference Price adjustment	Transparent Behavioural Change
Trade and Transaction Reporting	Trade and Transaction Reporting (TTR) GUI improvements	Optional
Post-Trade Processing	Settlement Cycle T+1 for Rights and Shareholder Options	Configuration Change
	E-Mail recipients for Cancellation notifications	Optional
	Billing of extraordinary fees	Transparent
	Structure and content of Billing Reports in Member Section	Mandatory
Market and Reference Data	Harmonisation of Trading Segments designation	Configuration Change
Other services	New Domain Name for Member Section	Mandatory Configuration Change
	XBTR – Bilateral Trading for Structured Products <ul style="list-style-type: none"> • New Primary or Secondary Market flag • Notification E-Mail service 	Optional

Further details about technical changes with SMR5.1 are included in the [Technical Release Notes for SMR5.1](#) published in the [Member Section](#) of SIX Swiss Exchange.

3. Functional Changes

3.1. On Order Book Trading

3.1.1. Self-Match Prevention (SMP)

SIX Swiss Exchange introduces the new optional service «Self-Match Prevention» for On Exchange – On Order Book trading.

This new service prevents the execution of On Order Book orders and -quotes of the same Participant (Party ID) that are designated with the trading capacity «Principal» (trading in own name and for own account) in Continuous Trading. «Self-Match Prevention» will be implemented with the «cancel oldest» principle; this means that in an executable situation between orders/quotes on both sides of the order book entered by the same Participant (Party ID) no trade will occur, instead, the older of the two orders/quotes (passive order) of the same Participant (Party ID) will be deleted from the order book and the aggressive order will be placed and remain in the order book and may execute against orders from other Participants.

Find below further detailed information about the new «Self-Match Prevention» service offering.

Self-Match Prevention supported for...

Trading Interface(s)	<ul style="list-style-type: none"> Standard Trading Interface (STI) OUCH Trading Interface (OTI)
Market Model	<ul style="list-style-type: none"> Central Limit Order Book (CLOB)
OBM Partition	<ul style="list-style-type: none"> OBM - Partition 1 «Equity»
Trading Segments	<ul style="list-style-type: none"> Blue Chip Shares Mid-/Small-Cap Shares
Trading Period	<ul style="list-style-type: none"> Continuous Trading
Order Types	<ul style="list-style-type: none"> Normal Orders Iceberg Orders
Price Type	<ul style="list-style-type: none"> Market Limit
Order Validity	<ul style="list-style-type: none"> Day Immediate or Cancel Fill or Kill Good till Date
Trading Capacity	<ul style="list-style-type: none"> Principal (trading in own name and for own account)

«Self-Match Prevention» is technically also supported for Quote Trading Interface (QTI) and thus Quotes in the Market Maker Book (MMB) for both On Book Matcher (OBM) partitions, but with SMR5.1 SIX Swiss Exchange will enable the service for the aforementioned Trading Segments only.

«Self-Match Prevention» is supported during continuous trading only. In the event of Auctions (Pre-Opening, Break or Closing Auction) as well as in the event of Trading Halts (Delay Opening, Stop Trading, Non-Opening and Suspension) the execution of principal orders of the same Participant (Party ID) is not prevented.

«Self-Match Prevention» is supported for orders/quotes entered by the same Participant (Party ID). The service does not prevent the execution of principal orders/quotes of different Participants (Party IDs) of

the same Legal Entity. A Participant can however request the configuration of «Self-Match Prevention» for multiple different Party IDs.

The table below illustrates for which Party ID constellation «Self-Match Prevention» is supported:

«Self-Match Prevention» supported?	Participant on one side of order book	Participant on other side of order book
Yes	Legal Entity – 1 Party ID – 4000	Legal Entity – 1 Party ID – 4000
No	Legal Entity – 1 Party ID – 4000	Legal Entity – 1 Party ID – 5000
No	Legal Entity – 1 Party ID – 4000	Legal Entity – 2 Party ID – 6000

Please note that the configuration of «Self-Match Prevention» for a Party ID can only be done for both the Production and Membertest environments. It is not possible to configure «Self-Match Prevention» for a Party ID differently for Production and Membertest.

The Matching Rules for Continuous Trading described in clause 8 of [Directive 3: Trading](#) do not change. In the event of an execution of orders/quotes of the same Participant in continuous trading, the trade is not executed according to the Matching Rules but instead the order/quote with the older timestamp is deleted from the order book.

«Self-Match Prevention» is supported across all SWXess trading interfaces. If a Participant enters matching principal orders via the same Party ID but over different trading interfaces (e.g. STI and OTI), the «Self-Match Prevention» is applicable and the passive order will be deleted from the order book.

In the event an Iceberg order is cancelled from the order book due to «Self-Match Prevention», the entire quantity (visible and hidden) of the Iceberg order is deleted.

In the event an aggressive order with order validity (time in force) «Fill or Kill» or «Immediate or Cancel» is entered into the order book and would execute against a passive order of the same participant (Party ID), the following behaviour applies in context of «Self-Match Prevention»:

- If aggressive «Fill or Kill» or «Immediate or Cancel» could execute then Self-Match Prevention applies and the passive order is deleted from the order book.
- If «Fill or Kill» or «Immediate or Cancel» could not execute, then Self-Match Prevention does not apply and the aggressive «Fill or Kill» or «Immediate or Cancel» order is failed and deleted from the order book. The passive order remains in the order book.

Please find example scenarios of «Self-Match Prevention» in the [Annex](#) of this document.

The new service offering «Self-Match Prevention» is optional and free of charge.

Participants interested in using «Self-Match Prevention» are kindly requested to submit the [Party ID and SenderCompID Configuration Form](#) to Member Services (member.services@six-group.com).

Details about the impact of «Self-Match Prevention» on the SWXess Trading Interfaces are described in the respective [Trading Interface Specification](#) published in the [Member Section](#) of SIX Swiss Exchange.

3.1.2. Reference Price Adjustment

According to clause 9 in [Directive 3: Trading](#), SIX Swiss Exchange may adjust the Reference Price if there is no On Order Book trade during trading hours, despite having an open order book. In order to increase the probability of a price adjustment and to improve the quality of the Reference Prices, SIX Swiss Exchange will introduce a new additional method of Reference Price adjustment for certain trading segments with SWXess Maintenance Release 5.1 (SMR5.1).

As of 26 October 2015, SIX Swiss Exchange will have the following Reference Price adjustment methods in place:

- Reference Price – Last Inside Market at close
- Reference Price – Inside Market Window

The main difference between the two methods of Reference Price adjustment is how the Inside Market bid and ask prices are determined.

- For the **current method «Last Inside Market at Close»**, only the best bid and best ask prices of orders or quotes which are available in the order book are used. This means that if at the time of the closing of the respective trading segment no bid and/or ask orders are available in the order book, no Reference Price adjustment can be made.

- The new methodology «Reference Price – Inside Market Window» will have a time window of 60 Minutes from the close to check for available bid and ask prices.
 - This means that the system will first look for the most recent Inside Market pair (**bid and ask**) prices from the hour prior to the closing of the instrument to define whether a Reference Price adjustment will be made.
 - If during this time period no Inside Market pair is found, then the system will check for the most recent buy or sell price in the hour prior to the closing to determine whether a Reference Price adjustment can be made.

Please note that any order or quote posted in the order book during the Inside Market Window during a trading interruption (Stop Trading, Suspension etc.) will be ignored.

New Reference Price adjustment method « Inside Market Window» supported for

Trading Interface(s)	<ul style="list-style-type: none"> • Standard Trading Interface (STI) • OUCH Trading Interface (OTI)
Market Model	<ul style="list-style-type: none"> • Central Limit Order Book (CLOB) • Market Maker Book (MMB)
OBM Partition	<ul style="list-style-type: none"> • OBM - Partition 2 «Non-Equity»
Trading Segments	<ul style="list-style-type: none"> • SIX Structured Products • Bonds - CHF • Bonds – Non CHF • ETF • ETSF • ETP • Sponsored Funds

For all other trading segments the current Reference Price adjustment method «Last Inside Market at Close» will be applied.

For both Reference Price adjustment methods, the pre-conditions for an adjustment are the following:

- The security has reached the trading period «Continuous Trading» on the current trading day.
If the security has not gone into «Continuous Trading» due to suspension or non-opening or any other extraordinary situation, the Reference Price will not be adjusted.
- On the current trading day no On Exchange – On Order Book trade was executed.
Off Order Book trade reports are not relevant for the determination of the Reference Price.
- Buy and/or Sell limit orders or quotes have been available in the order book
Depending on the Reference Price adjustment method, either the Inside Market at the close is used or the most recent Inside Market or best buy/sell price within the time window of 60 Minutes is used.

If the pre-conditions for a Reference Price adjustment are given, the Reference Price for both methods will be adjusted as follows:

- If the current Reference Price is higher than the best limit sell order/quote price then the new Reference Price will be the best limit sell order/quote price
- If the current Reference Price is lower than the best limit buy order/quote price then the new Reference Price will be the best limit buy order/quote price

If the Reference Price is adjusted by the system because no On Order Book trade has occurred during a trading day, the Reference Price for both methods will be flagged in the Market Data Interface (MDI) with Reference Price Type «7 – Inside Market Price».

Please note that this change of Reference Price adjustment method for certain trading segments is fully transparent for the SWXess interfaces.

3.2. Trade and Transaction Reporting (TTR)

3.2.1. Trade and Transaction Reporting (TTR) GUI

The graphical user interface (GUI) for Trade and Transaction Reporting provided by SIX Swiss Exchange will be optimized to facilitate a more efficient reporting.

Please find below a summary of the new and improved functions of the Trade and Transaction Reporting Application. Further details about the usability of the Trade and Transaction Reporting Application are described in the «[Transaction and Trade Reporting User Manual](#)» which has been updated for SMR5.1 and is available via the [Member Section](#) of SIX Swiss Exchange.

3.2.1.1. Renaming of Cancel and Cancellation Request functions

The designation of the following functions in the Trade and Transaction Reporting Application often lead to confusion

- function to request the Cancellation of a trade with the Exchange according to clause 16 of [Directive 3: Trading](#)
- function to abort an action in the Trade and Transaction Reporting Application

In order to reduce incorrect usage of the GUI functions, the functions in the Trade and Transaction Reporting Application have been changed as follows:

Function to request the Cancellation of a Trade	Cancel Trade
Function to abort an action in the TTR GUI	Back (<i>previously Cancel</i>)

3.2.1.2. Reporting ID

For Trade- and Transaction Reporting the «RptID» (Reporting ID) is a mandatory attribute.

In the current implementation, Participants can either

- enter a Reporting ID manually in the respective field in the TTR GUI; or
- select the function «Generate RptID».

In order to prevent errors and rejections of Trade and Transaction Reports due to wrong or missing Reporting ID, the Trade and Transaction Reporting application will be enhanced. With SMR5.1, the Trade and Transaction Reporting Application will automatically generate a Reporting ID upon submission of the Trade or Transaction Report if the attribute is left blank.

3.2.1.3. Trader ID and Trader Name

According to clause 11.1.1 [Rule Book](#) and clause 5 [Reporting Office Rules](#), it is required to designate trade and transaction reports with the identification of the Participant or Securities Dealer (Participant/Party ID and Trader ID).


In order to minimize the risk and errors of selecting the wrong Trader ID upon login into the Trade and Transaction Reporting Application, the Login Info section of the Home page of the TTR GUI now additionally provides the Trader First- and Last Name as well as the Trader ID in the drop-down menu.

Current display of Trader in the Login Info section of the TTR GUI	10000
New display of Trader in the Login Info section of the TTR GUI	10000 HANS MUSTER

3.2.1.4. Enhancement for Cancellations of Transaction Reports submitted via file upload

According to clause 9.2.2 [Reporting Office Rules](#), incorrect Transaction Reports must be cancelled by the Participants themselves. Transaction Report cancellations are supported via the Trade and Transaction Reporting Application (TTR) by GUI or file upload function.

The process for generating the Transaction Report cancellation file according to the [Transaction Reporting Interface Specification](#) will be facilitated by the Trade and Transaction Reporting Application GUI as follows:

- Search for the Transaction Report file you wish to generate the Cancellation file in the [Result File Download](#) window of the GUI
- Select option whether to use existing or custom «Trade Report ID»
- Press button  next to the affected Transaction Reporting Result file to generate «Cancellation file»
- Save the «Cancellation file»
- Edit the «Cancellation file» if required (remove Transaction Reports you do not wish to cancel and change the TradeReportID to a unique value)
- Upload the «Cancellation file» via regular upload mechanism

Please note the following additional information in regard to the new functionality:

- Cancellations of Transaction Reports can be done until the business day following the reporting date at the latest.
- The Cancellation of Transaction Reports which have been executed successfully in the original file cannot be undone.
- This new functionality is only supported for Transaction Report cancellations
 - Cancellations of irregular On Order Book trades shall be requested via [Cancellation Form](#) in the [Member Section](#) of SIX Swiss Exchange
 - Cancellations of Off Order Book trade reports shall be requested via [Cancellation Form](#) in the [Member Section](#) of SIX Swiss Exchange or via the technical Cancellation Request functionality offered via Standard Trading Interface (STI) or Trade and Transaction Reporting (TTR) Application.

Find further information about the usage of the new functionality to generate «Transaction Reporting Cancellation» files in the [Technical Release Notes for SMR5.1](#) as well as in the «[Transaction and Trade Reporting User Manual](#)».

3.3. Post-Trade Processing

3.3.1. Settlement Cycle T+1 for Rights and Shareholder Options

After a consultation process with Participants and stakeholders, SIX Swiss Exchange will reduce the standard settlement cycle for Rights and Shareholder Options as of 26 October 2015 as follows:

Trading Day	Standard Settlement Cycle
For the first trading day of the security	T+2
As of second trading day until the last trading day of the security	T+1

As a consequence trades executed on the first trading day as well as the trades executed on the second trading day of the security, will settle on the same day. The table below provides an example:

Listing Date	Trade Date	Valid Standard Settlement Cycle	Settlement Date
First Trading Day	31 August 2015	T+2	2 September 2015
Second Trading Day	1 September 2015	T+1	2 September 2015
Third Trading Day	2 September 2015	T+1	3 September 2015
Fourth Trading Day	3 September 2015	T+1	4 September 2015

The securities assigned to the following parameters are affected by this change:

Trading Segment	598 – Rights and Options
Clearing Settlement Segment	RONC – Rights and Options (not cleared)
Security Type	<ul style="list-style-type: none"> • RI – Rights • SW – Shareholder Warrant

Please note that the following attributes in the Reference Data Interface (RDI) file «Traded Instrument» will not change as a result of the change of standard settlement cycle from T+2 on the first trading day to T+1 starting from the second trading day of the security:

- clearingSettlementSegmentCode will be RONC for the entire duration of the listing
- settlementCycleDays will be 1 for the entire duration of the listing

Based on the information provided via Reference Data Interface (RDI), it will not be visible that the standard settlement cycle will be different on the first trading day of the security.

Participants will see the Settlement Date (FIX Tag 64 - SettDate) of the trades in the Confirmation message (MsgType=AK) sent via Standard Trading Interface (STI). Please note that the Participant Trade Reconciliation Report (TRR) in the [Member Section](#) of SIX Swiss Exchange also includes the settlement date, along with other settlement-relevant information.

SIX Swiss Exchange will apply the new standard settlement cycle T+1 to all On Exchange – On Order Book trades executed in Rights and Shareholder Options. Trades that are executed Off Order Book but in accordance with the rules of the Exchange and subsequently reported to the exchange will implement T+1 as the standard settlement cycle as well. It will still be possible to report Off Order Book trades to the Exchange with non-standard settlement.

Please note that the shorter settlement cycle for Rights and Shareholder Options has an impact on the post-processing of trades:

- Cancellations of trades and Countertrades can only be executed by SIX Swiss Exchange on the same Business Day as the original trade (T)
- Corrections of trades can be reported by Participants only on the same Business Day as the original Trade (T)

Find below an overview of the Corrections, Cancellations and Countertrades time limits:

Settlement Cycle	Trades with Central Counterparty	Trades without Central Counterparty
T+1	Corrections, Cancellations and Countertrades can be done until End of Clearing (18:15 CET) on the same Business Day as the trade (T)	Corrections, Cancellations and Countertrades can be done until End of Business (22:00 CET) on the same Business Day as the trade (T)
T+2		Corrections, Cancellations and Countertrades can be done until End of Business (22:00 CET) on the Business Day following the trade (T+1)

The change to the new settlement cycle T+1 for Rights and Shareholder Options is completely transparent for the SWXess interfaces and therefore does not require any technical adjustments by the participants. SIX Swiss Exchange strongly recommends that participants check their own applications and interfaces, business processes and back-office workflows during the Membertest phase. In particular, they should test whether the trade settlement process works correctly from an end-to-end perspective. The trades will be forwarded to the test systems of the post-trade infrastructure of SIX SIS AG.

Please find further information about Settlement and Corporate Actions in the Market Guides published by SIX Securities Services in the [SIX SIS Private](#) site. Should you have any questions, please contact your Relationship Manager at SIX Securities Services. You find the contact details on the website of SIX SIS under the following link:

www.six-securities-services.com > Login > SIX SIS Private > Kontakte > Kontaktliste von SIX SIS

3.3.2. E-Mail recipients for Cancellation notifications

With the introduction of SWXess Maintenance Release 5.1 (SMR5.1), Participants will have more flexibility for configuring the recipients of the cancellation e-mail notification.

SIX Swiss Exchange will support the configuration of e-mail recipients for cancellation notifications as follows:

- The e-mail recipients can be different between the Production and Membertest environments
- Multiple e-mail recipients can be configured per environment

This flexible configuration of e-mail recipients is applicable for Mistrade Cancellations, On Behalf Cancellations as well as for On Behalf Countertrades. Please note that it is not supported to configure different e-mail recipients for the different types of cancellations; the same e-mail recipients for all types of cancellation notifications are used.

Participants interested in using the new flexible cancellation e-mail configuration, are kindly invited to request the configuration by submitting the [PartyID and SenderComplID Configuration Form](#) to Member Services (member.services@six-group.com).

3.3.3. Billing

3.3.3.1. Billing of Extraordinary Fees (Mistrade and On Behalf Cancellations/Countertrades)

According to clauses 5.3 and 5.4 in [Directive 7: Fees and Costs](#), the Exchange charges Participants an extraordinary fee as follows:

Type	Description	Fee Amount
Mistrade Fee	Fee for Participant who has caused a trade to be declared null and void (Mistrade)	CHF 200 per investigation
Cancellation Fee	Fee for performing a Cancellation or Countertrade of a On Order Book trade or a Trade Report on behalf of the Participant	CHF 50 per transaction

With the introduction of SMR5.1 the billing of these extraordinary fees will be automated and enhanced.

Participants will receive an invoice for extraordinary fees containing the summary of the Cancellations performed by the Exchange. Find an example invoice below:

Extraordinary Fees - Mistrade and Cancellations – August 2015

Service	Total	Grand total CHF
Trade Cancellations		300.00
Mistrades	200.00	
On Behalf Cancellations	100.00	
On Behalf Countertrades	0.00	

The details of the cancelled transactions will be included in the monthly Billing Reports. Additionally to all trade details of the cancelled trade, the billing report will also include the following new attributes:

Type	Description
Cancelled Flag	Indicates whether the original trade has been cancelled
Cancellation Flag	Indicates a trade that cancels a previous trade
Cancellation Type	Indicates the type of the Cancellation - Mistrade - On Behalf - Countertrade
Mistrade Decision Id	Unique identifier for the Mistrade Decision Note that if multiple trades have been cancelled in relation to a Mistrade Decision, all Cancellations records in the billing report include this identifier
Cancellation Fee Allocation	Indicates which party involved in the trade is billed for the Cancellation of the trade. For Cancellation Types «On Behalf» or «Countertrade», the following values are possible: - No Fee - Split - Buy - Sell For Cancellation types «Mistrade», the identification (Party ID) is displayed for the Participant who is charged for the cancellation.

Both, the invoice for Extraordinary Fees as well as the Billing Report, will be made available for download for the participant on a monthly basis in the [Member Section](#) of SIX Swiss Exchange.

Find further details about the Billing Report in the new available «Billing Report File Interface Specification» published in the [Member Section](#) of SIX Swiss Exchange.

3.3.3.2. Billing Reports

The Billing Reports provided in the [Member Section](#) of SIX Swiss Exchange will be enhanced to meet the Participants' needs and to be in line with the SWXess data structure.

The following changes have been made to the Billing Report:

- New attributes have been included in the report
- Decommissioned attributes have been removed from the report
- The sequence of the attributes in the report has been logically grouped
 - Trade Details
 - Trading Side Details
 - Security Details
 - Trade Type Details
 - Billing Details
- Trade Cancellations have been included in the report ([see section 3.3.3.1 of this document](#))
- The structure of the report has been harmonized for all Exchanges and Services
 - SIX Swiss Exchange
 - SIX Swiss Exchange - Reporting
 - SIX Structured Products Exchange
 - SIX Swiss Exchange Liquidnet Service (SLS)
 - Bilateral Trading Platform for Structured Products (XBTR)

Find further details about the Billing Report in the new available «Billing Report File Interface Specification» published in the [Member Section](#) of SIX Swiss Exchange.

Participants who process the Billing Report automatically need to make adjustments to their own applications as a result of the changes.

With the start of the Membertest phase, SIX Swiss Exchange will publish a **Test Billing Report** with the new structure for every Participant in the [Member Section](#) of SIX Swiss Exchange.

3.4. Market- & Reference data

3.4.1. Designation of Trading Segments

SIX Swiss Exchange will harmonize the designation of the trading segments in the Directives, Trading Guides as well as in the Reference Data Interface (RDI).

The new designations will be as follows:

ID	Trading Segment Designation RDI (tradingSegmentDescription)	Trading Segment Designation Directives and Trading Guides
26	Blue Chip Shares	Blue Chip Shares Blue Chip Aktien Actions Blue Chips
580	SIX Structured Products	Structured Products Strukturierte Produkte Produits Structurés
581 582	Bonds – Non CHF Bonds - Non CHF – MD*	Bonds – Non CHF Anleihen - Nicht CHF Emprunts - Non CHF
584	ETF	Exchange Traded Funds (ETF)
585	ETF on bonds of the Swiss Confederation	ETF on bonds of the Swiss Confederation ETF auf Anleihen der Schweizerischen Eidgenossenschaft ETF sur les emprunts de la Confédération Suisse
586	ETSF	Exchange Traded Structured Funds (ETSF)
588	ETP	Exchange Traded Products (ETP)
589	Bonds – CHF Swiss Confederation	Bonds - CHF Swiss Confederation Anleihen - CHF Schweizerische Eidgenossenschaft Emprunts - CHF Confédération Suisse
590 615	Bonds – CHF Bonds – CHF – MD*	Bonds – CHF Anleihen – CHF Emprunts - CHF
591	Mid-/Small-Cap Shares	Mid-/Small-Cap Shares Mid-/Small-Cap Aktien Actions Mid-/Small-Cap
592	Secondary Listing Shares	Secondary Listing Shares Sekundärkotierte Aktien Actions jouissant d'une cotation secondaire
594	Investment Funds	Investment Funds Anlagefonds Fonds de placement
597	Separate Trading Lines	Separate Trading Lines Separate Handelslinien Ligne de négoce séparée
598	Rights and Options	Rights and Options Anrechte und Optionen Droits et Options
612	Sponsored Funds	Sponsored Funds
613	Sponsored Foreign Shares	Sponsored Foreign Shares

*Minimum Denomination

These changes will be visible in the Reference Data Interface (RDI) with the introduction of SMR5.1 in the Production environment.

3.5. Other Service Offerings

3.5.1. Member Section

In order to meet more stringent security requirements, the domain name and the IP address of the [Member Section](#) of SIX Swiss Exchange will be amended as follows:

	Current	New with SMR5.1
Domain Name	https://www.six-swiss-exchange.com/member_section	https://secure.six-swiss-exchange.com/member_section
IP Address	153.46.250.75	153.46.250.85

The new domain name and IP address **requires mandatory configuration adjustments** for participants using automated scripts to upload files to or download files from the [Member Section](#). The following interfaces and services are affected by this change:

Interface / Service	Impact
Market Data Interface (MDI)	URL for automatic download of the MDI Trade Recap and Reconciliation File
Reference Data Interface (RDI)	URL for downloading the RDI files
Trade and Transaction Reporting (TTR)	URL for uploading Transaction Reporting file URL for downloading Transaction Reporting Reference files URL for Trade and Transaction Reporting Application (GUI)
Participant Trade Reconciliation Report (TRR)	URL for downloading the Trade Reconciliation report URL for Trade Reconciliation Report Download via GUI
Bilateral Trading for Structured Products (XBTR)	URL for automatic download of the Valuation Price file URL for Bilateral Trading GUI
Sponsored Access (SA)	URL for automatic upload of the Sponsored Access file containing the Risk Limits and Restricted Stock List URL for automatic download of the Audit Log File
Billing Reports and Invoices	URL for download of Billing Reports and Invoices

Please find further details about the [Member Section](#) domain name and IP address change in the [Technical Release Notes for SMR5.1](#).

3.5.2. SIX Swiss Exchange Liquidnet Service (SLS)

No functional changes apply to the SIX Swiss Exchange Liquidnet Service (SLS) with SMR5.1.

Please note that the new «Self-Match Prevention» offering is not applicable for trades in SLS because executions between orders of the same Participant (Party ID) are prevented in the market model.

Further information about the non-displayed liquidity platform is available on the [SLS](#) page.

3.5.3. Sponsored Access (SA)

No functional changes apply to «Sponsored Access» with SMR5.1.

SIX Swiss Exchange would like to inform Sponsoring Participants that the software supplier of the «RiskXposure» (RX) Graphical User Interface for Risk Management Controls (RMC) is now called [NASDAQ OMX TradeGuard](#).

Please note that the new «Self-Match Prevention» offering is not applicable for the Sponsored Access service because according to clause 7 in [Directive 8: Sponsored Access](#), any flow submitted by Sponsored Users must be flagged as client transactions (trading in own name but for the account of the client).

Further information on this service is available on the [Sponsored Access](#) page.

3.5.4. Bilateral Trading Platform for Structured Products (XBTR)

With SWXess Maintenance Release 5.1 (SMR5.1), the Bilateral Trading Platform for Structured Products will be enhanced functionally.

In case of questions do not hesitate to contact the platform operator SIX Structured Products Exchange (+41 58 399 23 18 / structured.products@six-swiss-exchange.ch)

3.5.4.1. Primary Market Flag

In order to ensure comprehensive straight through processing on the buy and issuer side the option to flag the transaction as a primary market trade will be introduced with SMR5.1 for XBTR. This new flag enables to separate primary market XBTR OTC trades from secondary market trades in the same ISIN and on the same platform.

The new attribute to flag a transaction as primary or secondary market is available as follows:

Interface	Description
Standard Trading Interface (STI) for Bilateral Trading	Pool (FIX Tag 691)
Bilateral Trading GUI (Member Section)	Issue Status

The new flag is available for the following XBTR use cases (scenarios):

- Trade Submission**
 Trade Submission functionality allows a XBTR participant to report his side of a trade which was agreed with another participant of XBTR. The Bilateral Trading platform matches each submitted trade leg.
 Primary or Secondary Market flag must be set by both involved parties on the respective trade report entry and is considered by the system for matching both trade legs.
- Request for Quote (RfQ)**
 In the trading model RfQ (Request for Quotes), two participants can negotiate the terms of a trade and, if they reach an agreement, generate a trade.
 Primary or Secondary Market flag can be set by the issuer in the Quote to the Investor in order to define whether the trade might become a primary- or a secondary market trade. The flag set by the Issuer on the Quote is processed through and displayed in all other messages of the RfQ process.

If the flag is not set, it is interpreted by the Bilateral Trading platform as «Secondary Market».

Further details about the use of the Bilateral Trading platform and the new flag are available in the «[Bilateral Trading GUI User Manual](#)» and in the «[Standard Trading Interface \(STI\) Specification - Bilateral Trading](#)» which have been updated for SMR5.1 and are available via the [Member Section](#) of SIX Swiss Exchange.

3.5.4.2. E-Mail Notifications for XBTR Events

With SMR5.1, the Bilateral Trading GUI will provide optional e-mail notifications to the issuer or investor using the application.

The «XBTR E-Mail Alerts» notify the GUI users of pending transactions or changes in transaction status and are available for the following XBTR use cases (scenarios) and events (non-exhaustive list):

- **Trade Submission**
 - Pending Trade Submission
 - Deleted Trade Submission
 - Accepted or Rejected Trade Submission
 - Match or Expiry of Trade Submission
- **Request for Quote (RfQ)**
 - New Request for Quote
 - Accept or Reject Request for Quote
 - Quote offer to follow from Issuer
 - Pending Quote from Issuer
 - Quote Response
 - Execution
 - Trade Cancellation

The following is applicable for the «XBTR E-Mail Alerts» via Bilateral Trading GUI:

- XBTR Participants can configure e-mail alert recipients themselves via menu «Email Alert Settings» in the Bilateral Trading GUI
- Bilateral Trading GUI supports the entry, modification and deletion of XBTR e-mail alert recipients. Enabling and disabling of alerts for e-mail recipients is also supported
- Up to ten XBTR e-mail alert recipients can be configured per environment (Membertest and Production) per XBTR Participant (Party ID)
- It is not supported to enable or disable e-mail alerts for individual events in the XBTR use cases

Further details about the new «XBTR E-Mail Alerts» for the Bilateral Trading platform is available in the «[Bilateral Trading GUI User Manual](#)» which has been updated for SMR5.1 and is available via the [Member Section](#) of SIX Swiss Exchange.

4. Technical Changes

The functional changes introduced with SWXess Maintenance Release 5.1 (SMR5.1) are essentially transparent for SWXess interfaces and do not require any mandatory adjustments to Participant's own applications and interfaces.

The only exception is the mandatory adjustment of Participants' scripts for the automated up- and download of files from the [Member Section](#) due to the new domain name.

The following changes are transparent for participants but might require configuration changes on the participants side:

- Standard Settlement Cycle T+1 for Rights and Options
- Billing Reports in Member Section
- Harmonisation of Trading Segment Designation

4.1. Technical Release Notes

Please find all relevant technical information related to SWXess Maintenance Release 5.1 (SMR5.1), including required documents and artefacts, configuration changes, migration plan as well as testing activities in the [Technical Release Notes for SMR5.1](#) published in the [Member Section](#) of SIX Swiss Exchange.

4.2. Manuals and Specifications

All relevant SWXess Specifications, Manuals and other artefacts can be downloaded from the [Member Section](#) of SIX Swiss Exchange:

Document	Link
MSC Messages	https://www.six-swiss-exchange.com/member_section/it/messages.html
Release Documents	https://www.six-swiss-exchange.com/member_section/it/release_docs.html
Manuals & Specifications	https://www.six-swiss-exchange.com/member_section/it/manuals.html

5. Regulatory Changes

The functional changes introduced with SMR5.1 also necessitate changes to the rules and regulations. The following Rules, Directives and Guides are affected in this respect and have been amended accordingly:

- **Rule Book** of SIX Swiss Exchange and SIX Structured Products Exchange
- **Reporting Office Rules** for the Fulfilment of the Legal Reporting Requirements for Securities Dealers
- **Directives** of SIX Swiss Exchange and SIX Structured Products Exchange
 - Directive 3: Trading
 - Directive 7: Fees and Costs (SIX Structured Products Exchange only)
- **Trading Guide**

The following functional changes have resulted in amendments to the regulations:

- Self-Match Prevention
- Standard Settlement Cycle T+1 for Rights and Options
- Harmonisation Trading Segment Designation

The updated versions of Rules, Directives and Guides are available on the websites of the respective Exchange:

Document	Link
SIX Swiss Exchange	Rules Directives Guides
SIX Structured Products	http://www.six-structured-products.com/en/about-us/exchange-trading/trading-rules

The following table contains a detailed overview of the amendments to the Rules and Directives:

Regulatory Document	Type of change	SIX Swiss Exchange Reference	SIX Structured Products Reference	Title
Rule Book	Changed	Clause 13.1	Clause 13.1	Execution of trades
	Changed	Clause 14.2.7	Clause 14.2.4	Consequences of default
	New	Clause 27 para. 9	Clause 26 para. 7	Revision
Reporting Office Rules for the Fulfilment of the Legal Reporting Requirements for Securities Dealers	New	Clause 11.5.2 para. 5	-	Revision
	Changed	Annex B	-	Reporting Fees (Designation of Instrument Segments)
Directive 3: Trading	New	Clause 8 para. 4	Clause 8 para. 4	Continuous Trading (Self-Match Prevention)
	Changed	Clause 20	Clause 19	Classification of markets and trading segments
	New	Annexes A to M Clause 2 para. 3	Annex A Clause 2 para. 3	Market model and order types (Self-Match Prevention)
	Changed	Annex C	-	Rights and Options (Designation of Trading Segment)
	New	Annex C para. 1	-	Clearing and Settlement (Settlement Cycle T+1)

Regulatory Document	Type of change	SIX Swiss Exchange Reference	SIX Structured Products Reference	Title
Directive 7: Fees and Costs	Change	-	Annex A	Structured Products (Designation of Trading Segment)

A list of the revisions made to the Rules and Directives of SIX Swiss Exchange, including information on changes to content, affected clauses and effective dates, can be found at:

http://www.six-swiss-exchange.com/participants/regulation/revisions/rule_book_en.html

The Trading Guides have also been revised in connection with the introduction of SMR5.1 and are now available at:

http://www.six-swiss-exchange.com/participants/regulation/trading_guides_en.html

6. Migration

6.1. Business Migration

The upgrade to SWXess Maintenance Release 5.1 (SMR5.1) requires the migration of transactional and reference data as well as various configuration changes. SIX Swiss Exchange will ensure that the migration footprint on Participants is as minimal as possible.

6.1.1. Transactional Data

6.1.1.1. Orders

All order books will be migrated to SMR5.1 by SIX Swiss Exchange. No active orders will be deleted from the order books as a result of the migration and Participants do not have to take any actions in this regard.

6.1.1.2. On- and Off Order Book Trades

The On Order Book and Off Order Book trades will be migrated to SMR5.1 and therefore no post processing restrictions apply. On Monday after the migration it is possible to correct and cancel on- and Off Order Book trades which were executed or reported on Friday before the migration.

6.1.1.3. Publication of Off Order Book and Off Exchange trades

Off Order Book and Off Exchange trades which have been reported before the migration and are subject to delayed publication according to Annex T: Delayed Publication of [Directive 3: Trading](#) will be published via Market Data Interface (MDI) as normal after the migration to SMR5.1 if applicable.

6.1.2. Security and Segment Reference Data

Any configuration changes in the security and segment reference data will be transparent to the Participants and will be transmitted via Reference Data Interface (RDI).

6.1.2.1. Instrument Reference Data

No SMR5.1 related instrument reference data modification will take place during the migration.

In the context of the changed standard settlement cycle for rights and options and the harmonisation of the trading segments, starting with SMR 5.1 in the Production environment, the rights and shareholder options will be configured with the same trading parameters. It will still be possible to distinguish rights and shareholder options by their differing Security Type.

SIX Swiss Exchange will setup a Right and a Shareholder Option in the Membertest environment for the entire testing phase in order that participants can test the new standard settlement cycle T+1 for these products:

Attribute	Right	Shareholder Option
Description Short	SMR5.1 TEST PROCIMMO ANR	SMR5.1 TEST ALTNP ALTN P 09/13
ISIN	CH0223393007	CH0214143643
Trading Currency	CHF	USD
Security Exchange	XSWX	XSWX
Security Symbol	PSCF1	ALTNP
Valor Number	22339300	21414364
Security Type	RI - Rights	SW - Shareholder's Warrant
First Trading Date	14 September 2015	14 September 2015
Earliest Settlement Date	16 September 2015	16 September 2015
Trading Segment	598 – Rights	598 – Rights
Clearing Settlement Segment	RONC – Rights and Options (not cleared)	RONC – Rights and Options (not cleared)
Settlement Cycle Days	1	1
Price Step Group	RI - Rights	RI - Rights
Stop Trading Category	67 - No Stop Trading	67 - No Stop Trading
Last Trading Date	16 October 2016	16 October 2015

6.1.2.2. Trading Segment

The following Trading Segments will be configured to support Self-Match Prevention:

Trading Segment ID	Trading Segment Description	Self-Match Prevention enabled
26	Blue Chip Shares	TRUE
591	Mid-/Small-Cap Shares	TRUE

The following Trading Segments will be configured to support the new **Reference Price Adjustment** methodology:

Trading Segment ID	Trading Segment Description	Reference Price Bid Offer window enabled
580	SIX Structured Products	TRUE
581	Bonds – Non CHF	TRUE
582	Bonds – Non CHF – MD	TRUE
584	ETF	TRUE
585	ETF on Swiss Confederation Bonds	TRUE
586	ETSF	TRUE
588	ETP	TRUE
589	Bonds - CHF - Swiss Confederation	TRUE
590	Bonds - CHF - Domestic and Foreign	TRUE
612	Sponsored Funds	TRUE
615	Bonds - CHF - Domestic and Foreign - MD	TRUE

The following Trading Segments will be renamed in context with the harmonisation of the trading segment description during the Production migration:

Trading Segment ID	Trading Segment Description old	Trading Segment Description new
585	ETF on Swiss Confederation Bonds	ETF on bonds of the Swiss Confederation
581	Bonds – CHF Domestic and Foreign	Bonds – CHF
615	Bonds – CHF Domestic and Foreign – MD	Bonds – CHF – MD
598	Rights	Rights and Options

The following Trading Segment will be deleted during the Production migration:

Trading Segment ID	Trading Segment Description
595	Derivatives non-quoted

With the introduction of SMR5.1, any instruments which used to be assigned to this deleted trading segment, will be setup in the following renamed trading segment:

Trading Segment ID	Trading Segment Description
598	Rights and Options

Securities which are assigned to the deleted trading segment «Derivatives non-quoted» will be migrated to the trading segment «Rights and Options». As a result of the trading segment change, any orders will be deleted from the order books on the last trading day of the security. Participants will be informed separately in due course if such a trading segment change for Shareholder Options is required.

6.1.2.3. Clearing and Settlement Segment

The following Clearing Settlement Segment will be created during the Membertest migration in context with the introduction of the standard settlement cycle T+1 for rights and options:

Attribute	Value
Code	RONC
Description	Rights and Options (not cleared)
Settlement Eligible	TRUE
Clearing Eligible	FALSE
Settlement Cycle Days	1

6.1.2.4. Other Parameters

In the context of the changed standard settlement cycle for rights and options and the harmonisation of the trading segments the following Trading Parameters will be renamed during the Production migration:

Trading Parameter	ID	Description old	Description new
Price Step Group	RI	Rights	Rights and Options
Billing Product Segment Code	2140	Rights	Rights and Options

6.1.3. Participant Reference Data

6.1.3.1. Self-Match Prevention

In the context of the new «Self-Match Prevention» offering, during the migration in the Membertest environment, the configuration for the service will be disabled for all Participants (Party IDs) by default.

Participants who are interested in using the new «Self-Match Prevention» offering, are kindly invited to request the configuration by submitting the [PartyID and SenderCompID Configuration Form](#) to Member Services (member.services@six-group.com). Member Services will setup the requested configuration in the Membertest environment in order that Participants can test their new configuration and the new service prior to the Production go-live.

When «Self-Match Prevention» is introduced for Blue Chip Shares and Mid-/Small-Cap Shares in the Production environment all Party IDs which have «Self-Match Prevention» configured for the Membertest environment will automatically also have «Self-Match Prevention» enabled for the Production environment.

If you wish to test the «Self-Match Prevention» functionality in the Membertest environment but you do not wish to enable «Self-Match Prevention» on the go-live of the service in Production, please contact Member Services (member.services@six-group.com). You can either configure an existing Party ID which is enabled for Membertest only for «Self-Match Prevention» or you can request a new Party ID for Membertest only to test the «Self-Match Prevention» functionality. Please use the [PartyID and SenderCompID Configuration Form](#) for any configuration requests.

Please note that any configuration changes to the Participant setup must be requested by 9 December 2015 at the latest in order that SIX Swiss Exchange can guarantee the correct migration to the Production environment.

6.1.3.2. Cancellation E-Mail Addresses

During the migration of SMR5.1 in the Membertest environment, SIX Swiss Exchange will use the «Mistrade E-Mail Address» currently configured in the system and use that same value as «Cancellation E-Mail Address» for both the Membertest and Production environments. This migration approach ensures that Participants will still receive cancellation e-mail confirmations to their current E-Mail address.

Participants who are interested in using the possibility to use different e-mail addresses in the Membertest- and Production environment or wish to configure additional E-Mail recipients for the cancellation e-mail confirmations, are kindly invited to request the configuration by submitting the [PartyID and SenderCompID Configuration Form](#) to Member Services (member.services@six-group.com). Member Services will set up the requested E-Mail configuration in the respective environment.

Please note that any configuration changes to the Participant setup must be requested by 16 October 2015 at the latest in order that SIX Swiss Exchange can guarantee the correct migration to the production environment.

6.1.4. Other Migration Aspects

6.1.4.1. Member Section Domain

The new domain name for the [Member Section](#) of SIX Swiss Exchange will be officially introduced during the migration in the Production environment.

However, during the Membertest phase, a number of services affected by the new Member Section domain will be available for testing via a new domain. Please find further details about the availability of the new domain in section 4.1.2 of the [Technical Release Notes for SMR5.1](#).

6.1.4.2. Billing Reports

SIX Swiss Exchange will not migrate the existing Billing Reports on the Member Section to the new file format. As of November 2015, the Billing Reports will be provided in the Member Section in the new file format.

In order that Participants can test the new Billing Reports, at the beginning of the Membertest phase, SIX Swiss Exchange will provide for each Participant their respective Billing Report from the Month of August 2015 containing Production data in the new file format and publish it in the [Member Section](#) of SIX Swiss Exchange.

https://secure.six-swiss-exchange.com/member_section/business_reports_mtest/business_reports_mtest.html

Due to changes in the implementation of the Billing Reports and «[Billing Report File Interface Specification](#)» during the Membertest phase, SIX Swiss Exchange will publish a new additional version of the Specification and the corresponding Billing Reports in the [Member Section](#) as follows:

Date	Activity
Mon 05.10.2015	Publication of new Billing Report File Interface Specification
Fri 09.10.2015	Publication of new Test Billing Reports with Production data from September 2015

SIX Swiss Exchange will provide for each Participant their respective Billing Report from the month of September 2015 containing data from the Production environment in the updated file format.

Please note that the following attributes will not be populated in the **Test Billing Report**:

- User Code
- Counterparty ID
- Cancellation Type
- Mistrade Decision ID
- Cancellation Fee Allocation

6.2. Technical Migration

Please find further details about the technical migration, schedule, activities and configuration of SMR5.1 in the [Technical Release Notes for SMR5.1](#) published in the [Member Section](#) of SIX Swiss Exchange.

7. Rollout

The following table shows the key dates of the rollout of SMR5.1 and SMP:

Date	Activity
Fri 11.09.2015 and Sat 12.09.2015	Migration to SMR5.1 in Membertest environment
Mon 14.09.2015	First trading day with SMR5.1 in Membertest environment
Wed 23.09.2015 – 14:00	Intraday Recovery Test – On Book Matcher (OBM) Partition 1 «Equities» down
Mon 28.09.2015	Communication and Publication of updated Rule Book, Directives and Guides for SMR5.1
Wed 30.09.2015 – 14:00	Intraday Recovery Test – On Book Matcher (OBM) Partition 2 «Non-Equities» down
Wed 07.10.2015 – 14:00	Intraday Recovery Test – Both On Book Matcher (OBM) Partitions down
Wed 14.10.2015 – 09:30	Intraday Recovery Test – STI FIX Infrastructure Failure – Single Gateway Failure
Wed 21.10.2015 – 14:00	Intraday Recovery Test – STI FIX Infrastructure Failure – Double Gateway Failure
Sat 24.10.2015 and Sun 25.10.2015	Migration to SMR5.1 in Production environment
Mon 26.10.2015	First trading day with SMR5.1 in Production environment
Mon 23.11.2015	New release of Self-Match Prevention available for testing in Membertest environment
Wed 25.11.2015 – 14:00	Intraday Recovery Test – Both On Book Matcher (OBM) Partitions down
Wed 02.12.2015 – 14:00	Intraday Recovery Test – On Book Matcher (OBM) Partition 1 «Equities» down
Sat 12.12.2015 and Sun 13.12.2015	Introduction of new release of Self-Match Prevention in Production environment
Mon 14.12.2015	First trading day with Self-Match Prevention in Production environment

Further key dates for the SMR5.1 Membertest phase are available in the [Technical Release Notes for SMR5.1](#) published in the [Member Section](#) of SIX Swiss Exchange.

8. Testing

Before the introduction of SWXess Maintenance Release 5.1 (SMR5.1) in the production environment, Participants will be able to test the new and changed functionality in the Membertest environment for approximately 6 weeks.

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

Suggested mandatory tests:

- Connection Tests for new domain name in Member Section
- Standard Settlement Cycle T+1 for Rights and Shareholder Options
- Regression tests of own applications with SMR5.1 Specifications and Implementation

You are kindly invited to contact Member Services (member.services@six-group.com) if you require assistance with testing in the Membertest environment. Information about automated testing services provided by SIX Swiss Exchange in the Membertest environment are available on the [SWXess Testing Services](#) page in the [Member Section](#).

For SECOM related queries please contact the test support team at SIX Securities Services (ClientTesting@sisclear.com).

Please refer to the following links for further information about the Membertest environment availability and trading hours:

Document	Link
Environment Calendar	http://www.six-swiss-exchange.com/participants/participation/environment_calendar_en.html
Trading Hours	http://www.six-swiss-exchange.com/member_section/download/public/Trading_Hours_Membertest.pdf

Further details about testing activities during the Membertest phase such as Background Load tests, Recovery- and Failover tests are available in the [Technical Release Notes for SMR5.1](#) published in the [Member Section](#) of SIX Swiss Exchange.

9. Document History

Version	Date	Description
1.00	07.09.2015	First version of the document published with <u>SIX Swiss Exchange message no. 29/2015</u>
1.10	28.09.2015	Updated version of the document published with <u>SIX Swiss Exchange message no. 34/2015</u> <ul style="list-style-type: none">• Section 5 – Table of detailed regulatory changes• Section 6.1.2.1 – Last Trading Date for test-only Rights and Options• Section 6.1.3.1 – No Conformance Tests required for Self-Match Prevention service• Section 6.1.4.2 – Additional Billing Report Specification and Test Billing Report• Section 7 – Additional STI FIX Infrastructure Failure Test on 21 September 2015• Section 10 – Different Result for Self-Match Prevention Scenario 9
1.20	11.11.2015	Updated version of the document published with <u>SIX Swiss Exchange message</u> <ul style="list-style-type: none">• Section 3.1.1 – Self-Match prevention functionality• Section 3.3.1 – Time Limits of Cancellations for securities with Settlement Cycle T+1• Section 6.1.3.1 – Configuration and Migration of Self-Match Prevention• Section 7 – Introduction Date of Self Match Prevention and additional Recovery Tests• Section 10 – Updated and new Self-Match Prevention Scenarios

10. Annex

The scenarios below provide some examples of how «Self-Match Prevention» behaves.

Note that in the matching scenarios below the aggressive order is in **red** and the passive order(s) deleted from the order book in *italic*. «Self-Match Prevention» has been configured for Party ID 4000 of the Legal Entity 4.

10.1. Scenarios: Party ID

Scenario 1 Executable Normal Orders from the same Participant								
Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.50	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
Entity - 4 Party – 4000 Capacity - P	Normal Good for Day OTI	-	30	88.00	20	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party – 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	The passive Normal Order on the ask side of the order book of Party 4000 is deleted The aggressive Normal Order on the bid side of Party 4000 is placed in the order book							
Comment	Self-Match Prevention is applicable regardless of the order quantity							
Scenario 2 Executable Normal Orders of different Parties belonging to same Legal Entity								
Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.50	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
Entity - 4 Party – 4500 Capacity - P	Normal Good for Day OTI	-	30	88.00	20	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	Execution of quantity 20 @ price 88 Remaining quantity of 10 belonging to Party 4500 remains in the order book							
Comment	Self-Match Prevention is not applicable for differing Party IDs of the same Entity							

Scenario 3 Executable Normal Orders of the same Participant marked as Riskless Principal

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.50	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
Entity - 4 Party – 4000 Capacity - R	Normal Good for Day OTI	-	30	88.00	20	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - R
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party – 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				

Result Execution of quantity 20 @ price 88
Remaining quantity of 10 belonging to Party 4000 remains in the order book

Comment Self-Match Prevention is not applicable for orders marked with trading capacity Riskless Principal

Scenario 4 Multiple resting executable Normal Orders of the same Participant

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
Entity - 4 Party – 4000 Capacity - P	Normal Good for Day OTI	-	30	88.50	10	-	Normal Good for Day STI	Entity - 4 Party – 4000 Capacity - P
				88.00	20	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party – 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				

Result Both passive Normal Orders of Party 4000 on the ask side of the order book are deleted
The aggressive Normal Order of Party 4000 on the bid side is placed in the order book

Comment Self-Match Prevention is applicable to multiple resting executable orders of the same Party

10.2. Scenario: Non-Trading Period

Scenario 5 Executable Normal Orders of the same Participant during Closing Auction								
Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.50	10	-	Normal Good for Day STI	Entity - 5 Party - 5000 Capacity - R
Entity - 4 Party - 4000 Capacity - P	Normal Good for Day OTI	-	30	88.00	20	-	Normal Good for Day OTI	Entity - 4 Party - 4000 Capacity - P
Entity - 2 Party - 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party - 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	Execution of quantity 20 @ price 88 at after Closing Auction Remaining quantity of 10 at price 88 expires and is deleted from the order book							
Comment	Self-Match Prevention is not applicable during any non-trading periods							

10.3. Scenario: Trading Interfaces

Scenario 6 Executable Normal Orders of the same Participant submitted via different trading interfaces								
Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.50	10	-	Normal Good for Day STI	Entity - 5 Party - 5000 Capacity - R
Entity - 4 Party - 4000 Capacity - P	Normal Good for Day STI	-	30	88.00	20	-	Normal Good for Day OTI	Entity - 4 Party - 4000 Capacity - P
Entity - 2 Party - 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party - 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	The passive Normal Order on the ask side of the order book of Party 4000 is deleted The aggressive Normal Order on the bid side of Party 4000 is placed in the order book							
Comment	Self-Match Prevention is applicable regardless of the trading interfaces used							

10.4. Scenarios: Stop Trading

Scenario 7 Aggressive Normal Order executable with multiple resting Orders of which one triggers Stop Trading									
Conditions Reference Price 88.00 Stop Trading Range 2%									
Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party	
Entity - 4 Party – 4000 Capacity - P	Normal Good for Day OTI	-	20	90.50	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R	
				88.00	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P	
				87.75	10	-	Normal Good for Day OTI	Entity - 3 Party – 3000 Capacity - P	
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50					
Result	Aggressive Normal Order executes with passive Normal Order of Party 3000 on sell side at 87.75 The passive Normal Order on the ask side of the order book of Party 4000 is deleted. Stop Trading is triggered due to price deviation.								
Comment	-								

Scenario 8 Aggressive Normal Order executable with multiple resting Orders of which one triggers Stop Trading									
Conditions Reference Price 88.00 Stop Trading Range 2%									
Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party	
Entity - 4 Party – 4000 Capacity - P	Normal Good for Day OTI	-	30	90.50	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R	
				90.25	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P	
				90.00	10	-	Normal Good for Day OTI	Entity - 3 Party – 3000 Capacity - P	
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50					
Result	Stop Trading is triggered due to price deviation. The passive Normal Order on the ask side of the order book of Party 4000 is deleted.								
Comment	-								

Scenario 9 Aggressive Normal Order executable with multiple resting Orders of which one triggers Stop Trading								
Conditions Reference Price 88.00 Stop Trading Range 2%								
Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
Entity - 4 Party – 4000 Capacity - P	Normal Good for Day OTI	-	20	90.75				
				90.50	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
				87.75	10	-	Normal Good for Day OTI	Entity - 3 Party – 3000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Result	Aggressive Normal Order executes with passive Normal Order of Party 3000 on sell side at 87.75 The passive Normal Order on the ask side of the order book of Party 4000 is deleted. No Stop Trading is triggered The aggressive Normal Order on the bid side of Party 4000 is placed in the order book							
Comment	-							

10.5. Scenarios: Iceberg Order

Scenario 10 Aggressive Normal Order executable with resting Iceberg Order of the same Participant								
Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.50	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
Entity - 4 Party – 4000 Capacity - P	Normal Good for Day STI	-	30	88.00	10	500	Iceberg Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party – 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	The passive Iceberg Order on the ask side of the order book of Party 4000 is deleted entirely The aggressive Normal Order on the bid side of Party 4000 is placed in the order book							
Comment	Self-Match Prevention deletes the entire quantity (visible and hidden) of the resting Iceberg Order							

Scenario 11 Aggressive Iceberg Order executable with resting Normal Order of the same Participant

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.50	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
Entity - 4 Party – 4000 Capacity - P	Iceberg Good for Day STI	100	10	88.00	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party – 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	The passive Normal Order on the ask side of the order book of Party 4000 is deleted The aggressive Iceberg Order on the bid side of Party 4000 is placed in the order book							
Comment	-							

Scenario 12 Aggressive Iceberg Order with top-up executable with multiple resting Normal Orders

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
Entity - 4 Party – 4000 Capacity - P	Iceberg Good for Day STI	100	10	88.50	50	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
				88.25	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
				88.00	10	-	Normal Good for Day OTI	Entity - 3 Party – 3000 Capacity - R
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party – 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	The aggressive Iceberg Order on the bid side of the order book executes against the resting order of Party 3000 at 88.00. The passive Normal Order on the ask side of the order book of Party 4000 is deleted due to SMP. The top-up of the aggressive Iceberg Order on the bid side of the order book occurs and quantity 50 executes against the resting order of Party 5000 at 88.50.							
Comment	The top-up of an aggressive Iceberg Order also triggers Self-Match Prevention							

10.6. Scenarios: Immediate Orders (FoK and IoC)

Scenario 13 Aggressive Normal Order - Fill or Kill executable with resting Normal Order

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.50	10	-	Normal Good for Day STI	Entity - 5 Party - 5000 Capacity - R
Entity - 4 Party - 4000 Capacity - P	Normal Fill or Kill STI	-	10	88.00	10	-	Normal Good for Day OTI	Entity - 4 Party - 4000 Capacity - P
Entity - 2 Party - 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party - 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				

Result The aggressive Normal Order – Fill or Kill on the bid side is failed and deleted from the order book. The passive Normal Order on the ask side of the order book of Party 4000 remains in the order book.

Comment Self-Match Prevention is not applicable if Fill or Kill is not executable

Scenario 14 Aggressive Normal Order - Fill or Kill executable with multiple resting Normal Orders

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.00	10	-	Normal Good for Day STI	Entity - 5 Party - 5000 Capacity - R
Entity - 4 Party - 4000 Capacity - P	Normal Fill or Kill STI	-	10	88.00	10	-	Normal Good for Day OTI	Entity - 4 Party - 4000 Capacity - P
Entity - 2 Party - 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party - 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				

Result The passive Normal Order on the ask side of the order book of Party 4000 is deleted. The entire aggressive Normal Order – Fill or Kill on the bid side is executed against the order on the ask side from Party 5000 at price 88.

Comment Self-Match Prevention is applicable if Fill or Kill is executable

Scenario 15 Aggressive Normal Order - Fill or Kill not executable with multiple resting Normal Order

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
<i>Entity - 4 Party – 4000 Capacity - P</i>	<i>Normal Fill or Kill STI</i>	-	<i>50</i>	88.50	40	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
				88.00	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party – 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	The aggressive Normal Order – Fill or Kill on the bid side is failed and deleted from the order book The passive Normal Order on the ask side of the order book of Party 4000 remains in the order book							
Comment	Self-Match Prevention is not applicable if Fill or Kill is not executable							

**Scenario 16 Aggressive Normal Order – Fill or Kill executable with multiple resting Normal Orders
but triggers Stop Trading due to price deviation**

Conditions Reference Price 88.00
Stop Trading Range 2%

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				90.50	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
<i>Entity - 4 Party – 4000 Capacity - P</i>	<i>Normal Fill or Kill STI</i>	-	<i>20</i>	90.00	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party – 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	The aggressive Normal Order – Fill or Kill on the bid side is failed and deleted from the order book because it would trigger a Stop Trading. The passive Normal Order on the ask side of the order book of Party 4000 remains in the order book							
Comment	Self-Match Prevention is not applicable if Fill or Kill order is failed or would trigger a Stop Trading.							

Scenario 17 Aggressive Normal Order – Immediate or Cancel executable with multiple resting Normal Orders

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.00	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
Entity - 4 Party – 4000 Capacity - P	Normal IoC STI	-	15	88.00	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Entity - 3 Party – 3000 Capacity - R	Normal Good for Day OTI	-	10	87.00				
Result	The passive Normal Order on the ask side of the order book of Party 4000 is deleted Quantity 10 of the aggressive Normal Order – Immediate or Cancel on the bid side is executed against the order on the ask side from Party 5000 at price 88							
Comment	Self-Match Prevention is applicable if Immediate or Cancel is executable							

Scenario 18 Aggressive Normal Order – Immediate or Cancel executable with multiple resting Normal Orders

Bid Party	Bid Type Interface	Bid Hidden Quantity	Bid Visible Quantity	Price	Ask Visible Quantity	Ask Hidden Quantity	Ask Type Interface	Ask Party
				88.00	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
				88.00	10	-	Normal Good for Day STI	Entity - 5 Party – 5000 Capacity - R
Entity - 4 Party – 4000 Capacity - P	Normal IoC STI	-	15	88.00	10	-	Normal Good for Day OTI	Entity - 4 Party – 4000 Capacity - P
Entity - 2 Party – 2000 Capacity - R	Normal Good for Day STI	-	10	87.50				
Result	The passive Normal Order on the ask side of the order book of Party 4000 is deleted Quantity 10 of the aggressive Normal Order – Immediate or Cancel on the bid side is executed against the order on the ask side from Party 5000 at price 88 The passive Normal Order on the ask side of Party 4000 remains in the order book.							
Comment	Self-Match Prevention is applicable if Immediate or Cancel is executable with an order at a lower priority							

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