



Swiss Exchange

# SMR3 - Participant Readiness

of 24 August 2012



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## 1. Introduction

This document provides detailed information about the functional changes, migration and test phase of SWXess Maintenance Release 3 (SMR3).

### 1.1. Overview SWXess Maintenance Release 3 (SMR3)

The main goal of SWXess Maintenance Release 3 is to optimize «Trade Reporting» and «Clearing and Settlement» functionality. To this end, the existing «Exchange System» will be replaced by the new «Post Trade Processing» (PTP) component. The benefits of SMR3 are:

- Removal of unused legacy functionality
- Simplification of complex workflows
- Improvement in efficiency of post-trading systems and processes

The main functional changes concern the following areas:

- Reporting
  - Two-sided trade reports
  - Delivery Reports
  - Transaction Reports
- Corrections, Cancellations and Countertrades
- Clearing and Settlement
  - Determining Routing Instructions
  - Downgrading of Settlement Instructions
- Trade Types (Lists)
- New Value Added Channel
- New and decommissioned Reference Data

In addition, SIX Swiss Exchange will technically upgrade the On Book Matcher (OBM) of Partition 2 «Non-Equities» to the same X-stream-INET release already in operation for the Equities partition.

### 1.2. Definitions & Abbreviations

Term / Abbreviation	Explanation
CTI	Capacity Trading Interface
IMI	ITCH Market Data Interface
INET	Name of the new NASDAQ OMX platform
MDI	Market Data Interface
OBM	On Book Matcher
OTI	OUCH Trading Interface
PTP	Post-Trade Processor
RDI	Reference Data Interface
SCAP	SWXess Common Access Portal
SMR3	SWXess Maintenance Release 3
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
TTC	Trade Type Code

### 1.3. References

Find below a list of important references for SWXess Maintenance Release 3 (SMR3):

Reference	Link
SIX Swiss Exchange Messages	<a href="#">Public Website - Exchange Messages</a>
Rule Book and Directives	<a href="#">Public Website - Regulation</a>
Trading Guides	<a href="#">Public Website – Trading Guides</a>
Forms	<a href="#">Public Website - Forms</a>
MSC Messages	<a href="#">Member Section – MSC Messages</a>
Interface Specifications, Manuals and Guides	<a href="#">Member Section - Manuals</a>
Release Notes	<a href="#">Member Section – Release Documents</a>
FAQ	<a href="#">Member Section - FAQ</a>

### 1.4. Contacts

For business related questions, please contact Market Operations:

Topic	Team	Phone	E-mail
Reporting Clearing and Settlement Participant Configuration	Member Services	+41 58 399 2473	<a href="mailto:member.services@six-group.com">member.services@six-group.com</a>
Cancellations Emergency Deletions Suspensions	Market Control	+41 58 399 2475	<a href="mailto:helpdesk.exc@six-group.com">helpdesk.exc@six-group.com</a>
Instrument Reference Data	Static Data Operations	+41 58 399 2490	<a href="mailto:zulassung@six-group.com">zulassung@six-group.com</a>

Please contact your Local Support Centre for technical questions or submit a service request online in the Member Section:

Location	Phone	Fax	E-mail
Geneva	+41 58 399 5642	+41 58 499 5643	<a href="mailto:lsg@six-group.com">lsg@six-group.com</a>
London	+44 20 7864 4364	+44 207 864 4333	<a href="mailto:lsl@six-group.com">lsl@six-group.com</a>
Zürich	+41 58 399 2400	+41 58 499 2400	<a href="mailto:lsz@six-group.com">lsz@six-group.com</a>

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

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## 2. Functional Changes in Post-Trade Processing

### 2.1. Reporting

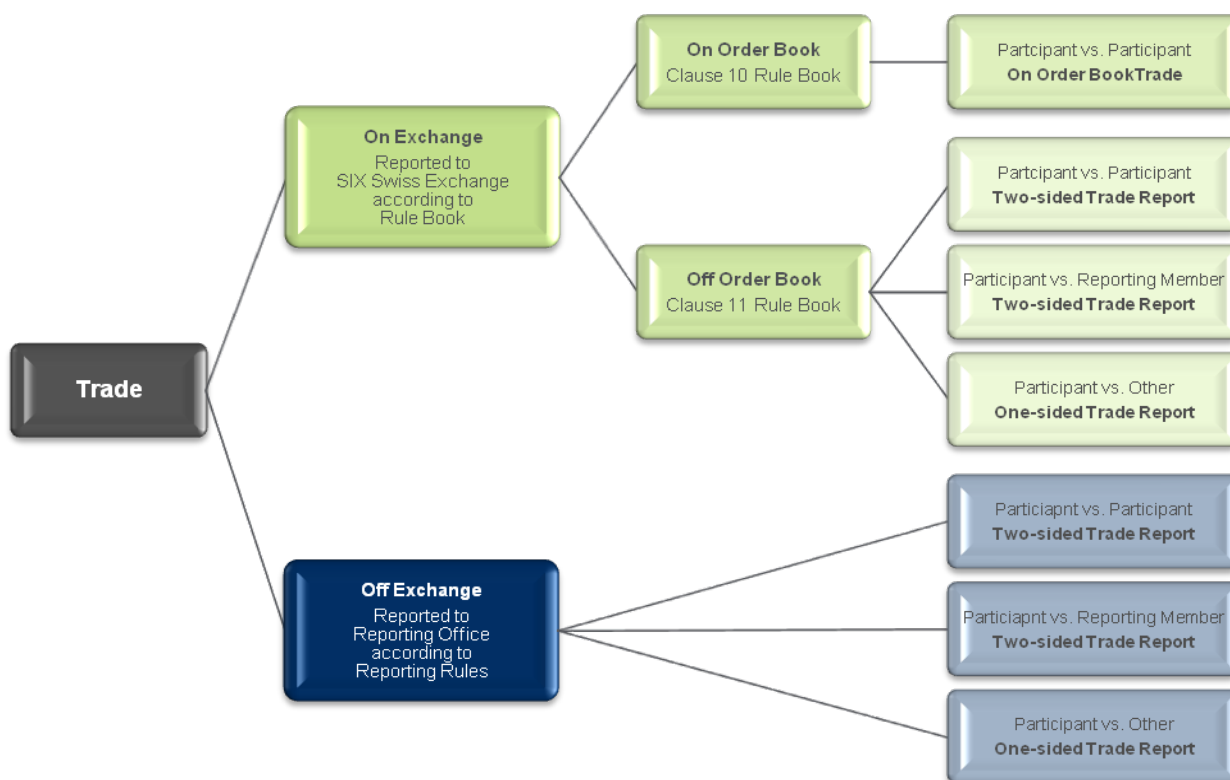
SIX Swiss Exchange provides the following off order book functionality:

Functionality	Description
Two-sided Trade Report	<ul style="list-style-type: none"><li>• Functionality to report off order book trades to the Exchange or the Reporting Office available to Participants and Reporting Members</li><li>• Reporting can be done via Standard Trading Interface (STI) or in the Member Section using the web based Reporting Tool</li><li>• These trade reports are published in market data and may be subject to delayed publication</li><li>• Clearing and Settlement may be instructed by the Exchange if both involved parties are participants of SIX Swiss Exchange</li></ul>
One-sided Trade Report	<ul style="list-style-type: none"><li>• Functionality to report off order book trades to the Exchange or the Reporting Office available to Participants and Reporting Members.</li><li>• Reporting can be done via Standard Trading Interface (STI) or in the Member Section using the web based Reporting Tool</li><li>• These trade reports are published via market data and may be subject to delayed publication</li><li>• Settlement of one-sided trade reports will not be instructed by SIX Swiss Exchange</li></ul>
Transaction Reports	<ul style="list-style-type: none"><li>• Functionality to transmit transaction reports as required in the «Reporting Office Rules for the Fulfilment of the Legal Reporting Requirement for Securities Dealers»</li><li>• Transaction reports are available to Participants and Reporting Members</li><li>• Reporting can only be done via the Member Section using the web based Reporting Tool or via Transaction File Interface</li><li>• These reports are not published in market data because they have previously been published as on order book trades or trade reports</li><li>• Clearing and Settlement does not apply for transaction reports</li></ul>

#### 2.1.1. Reporting Scenarios

Currently two-sided trade reports are only used to report off order book trades between participants of SIX Swiss Exchange. If the trade has been executed with a counterparty which is not a participant of the Exchange one-sided trade report functionality is used. Furthermore only SIX Swiss Exchange participants were allowed to report off order book trades as «On Exchange».

With SMR3 the use of two-sided trade reports will be extended to Reporting Members. The diagram below gives an overview of trading possibilities for SIX Swiss Exchange participants:



Participants may agree with Reporting Members to report the trade as On Exchange – Off Order Book according to clause 11. Rule Book. The reporting scenarios below provide further details on the report of trades with SMR3:

Party	Counterparty	Functionality	Reporting Flag (TrdSubType)
Participant	Participant	two-sided trade report	On Exchange or Off Exchange
	Reporting Member	two-sided trade report	On Exchange or Off Exchange
	Other	one-sided trade report	On Exchange or Off Exchange
Reporting Member	Participant	two-sided trade report	On Exchange or Off Exchange
	Reporting Member	two-sided trade report	Off Exchange
	Other	one-sided trade report	Off Exchange

Only matched two-sided trade reports between participants of SIX Swiss Exchange may be sent for clearing and settlement. Two-sided trade reports for which the counterparty is not a trading participant as well as all one-sided trade reports must be manually instructed for settlement by the involved parties.

## 2.1.2. Functional Changes to two-sided trade reports

The functionality for two-sided trade reports has been simplified for participants. The following functionalities for two-sided trade reports will be supported:

Functionality	Description
Enter – Accept	One of the involved parties in the trade enters the first leg of the two-sided trade report and the counterparty accepts the alleged trade report.
Trade Report Match	Both the involved parties in the trade enter their respective leg of the two-sided trade report and the legs are matched by Post-trade Processor (PTP). This functionality is only supported if both parties enter their respective side of the two-sided trade report on the same business day.
Delete	Unmatched legs of two-sided trade reports may be deleted by the entering participant prior to them matching.

The involved parties are responsible for ensuring that two-sided trade reports are matched or confirmed by the counterparty. With SMR3 unmatched two-sided trade reports remain valid and are regarded as correctly-reported trades by the entering party from a regulatory point of view, but they cannot be instructed for clearing or settlement. Two-sided trade reports may be confirmed or match until the end of the business day. Find below the list of attributes which must correspond between the trade legs in order for a match to take place:

Attribute	Description
Transaction Date	Both sides of the two-sided trade report must be entered on the same business day
Execution Date and Time	The trade agreed date and time must be the same for the two trade legs (a tolerance of 5 minutes applies)
Counterparty ID	The identification of the counterparties must correspond
Security	Both legs of the two-sided trade report must be in the same security
Price and Size	The price and size of the two trade legs must correspond
Trade Sub Type	The Trade Sub Type of both legs must be identical <ul style="list-style-type: none"> <li>• On Exchange</li> <li>• Off Exchange</li> <li>• Delivery Report (in this case the Commission attributes must also correspond)</li> </ul>
Settlement Type and Date	The selected Settlement Type and Settlement Date of both sides must be the same

Participants are obligated to correct erroneously-reported trades by deleting the unmatched two-sided trade report or by requesting a trade cancellation of matched two-sided trade reports or submitted one-sided trade reports by SIX Swiss Exchange. Note that unmatched two-sided trade reports cannot be deleted on the next business day. Find further information on the correction and cancellation of trade in section 2.2 of this document.

Find further details on the instruction of clearing and settlement of two-sided trade reports in section 2.5 and information about the publication of off order book trades in section 2.3 of this document.

The following two-sided trade report functions will be decommissioned with SMR3:

Functionality	Description
Decline	The party declines the two-sided trade report leg received by the other party.
Expiry	Unmatched two-sided trade reports are deleted at end of business and a trade cancellation is published.



### 2.1.3. Delivery Reports

«Delivery Reports» will be maintained with SWXess Maintenance Release 3 (SMR3) but with reduced functionality.

Delivery Reports will no longer trigger automatic settlement instructions by SIX Swiss Exchange. Participants must manually instruct the settlement of Delivery Reports.

Please note that Delivery Reports do not fulfil the participants' reporting obligations and that a separate Transaction Report must be submitted via Reporting Tool or Transaction File Interface.

Delivery Report can still be used for the confirmation of commissions between parties.

### 2.1.4. Transaction Reporting

Transaction Reporting Functionality via Standard Trading Interface (STI) will be decommissioned. Participants must use the Reporting Tool or Transaction File Interface to fulfil their Transaction Reporting duty.

Find further details in the [Transaction File Interface Manual](#) in the Member Section.

## 2.2. Corrections, Cancellations and Countertrades

### 2.2.1. Corrections

With SMR3 it will be possible to change the submitted «Order Capacity» (Principal or Riskless Principal) of an existing on or off order book trade.

Capacity Corrections shall be reported as one-sided trade reports with all the trade details of the original trade which is being corrected as well as the following additional attributes:

Attribute	Value
TrdSubType	Correction
OrigTrdMatchID	Trade Match ID of the trade to be corrected; this is validated by the exchange

Find below further details about Capacity Corrections:

- Capacity Corrections may be done on the same business day as the trade (T) as well as on the following business day (T+1)
- A trade may only be corrected once per side
- Capacity Corrections are not published in the market data
- Corrections of SIX Swiss Exchange Liquidnet (SLS) trades are not possible

SIX Swiss Exchange will cancel and re-instruct settlement with the new capacity, as appropriate. Participants will receive updated Confirmations of the original trade for instructed trades which are corrected but not for the Capacity Correction itself, nor for trades which are settled manually.

Capacity Corrections are included in the daily Trade Reconciliation Reports including the reference to their original trade.

The correction of the following attributes will be decommissioned with SMR3:

- Bank Internal Reference (Secondary ClOrdId)
- Segregated Clearing Account Type

## 2.2.2. Cancellations (Trade Reversals)

With SWXess Maintenance Release 3 (SMR3) Participants can no longer perform cancellations (Trade Reversals) of on or off order book trades themselves, instead SIX Swiss Exchange will perform any trade cancellations of on and off order book trades. SIX Swiss Exchange distinguishes between the following cancellation types:

Type	Description
Mistrade Reversal	<ul style="list-style-type: none"> <li>SIX Swiss Exchange has declared a trade null and void according to Directive 4: Market Control and executes a cancellation of the on order book or off order book trade.</li> </ul>
On-Behalf Reversal	<ul style="list-style-type: none"> <li>If an on order book trade which contravenes the Rule Book occurs accidentally, the involved parties have to request a cancellation by Market Control</li> <li>If an off order book trade is erroneous, the involved parties have to request a cancellation by Market Control</li> </ul>

Find below further general details about the cancellation of trades:

- Cancellations can generally be performed on the same business day as the trade (T) as well as on the following business day (T+1). In CCP-eligible securities cancellations can only be performed on the same business day as the trade during Clearing Hours (08:00 – 18:15 CET).
- A trade may only be cancelled once
- Cancellations are published in the market data and lead to a correction of volume and price data in the Value Added Channel of the Market Data Interface (MDI) if the cancellation is on the same business day as the trade
- If the period for trade cancellations has expired SIX Swiss Exchange Market Control may report countertrades in the name of the involved parties or instruct the involved parties to perform a countertrade themselves

Trade cancellations will be distributed as «Trade Capture Report Ack» messages and Confirmations via Standard Trading Interface (STI) and as Broken Trade Messages via OUCH Trading Interface (OTI). In addition to the technical messages, participants will be sent an e-mail or cancellations or countertrades performed by SIX Swiss Exchange.

Trade Cancellations can be identified as follows in the FIX Confirmation message via Standard Trading Interface (STI):

Attribute	Description
Reversal Indicator	<ul style="list-style-type: none"> <li>Indicates a trade that cancels a previous trade</li> </ul>
Orig Trd Match ID	<ul style="list-style-type: none"> <li>Trade Id of the original trade which has been cancelled</li> </ul>
Trade Condition	<ul style="list-style-type: none"> <li>The type of cancellation (Mistrade / On Behalf)</li> </ul>
Entry Source	<ul style="list-style-type: none"> <li>SSX Market Operations</li> </ul>

### 2.2.2.1. Mistrade

The process and handling of Mistrades remains unchanged. In case Market Operations declares a trade null and void, SIX Swiss Exchange will publish a news message, cancel the trade and publish the cancellation of the trade in the market data.

The news messages may be found under the following links on the SIX Swiss Exchange website:

Attribute	Description
Production	Public website <a href="http://www.six-swiss-exchange.com/news/newsboard/prod_de.html">http://www.six-swiss-exchange.com/news/newsboard/prod_de.html</a>
	Member Section <a href="http://www.scoach.ch/de/aktuelles/mistrades">http://www.scoach.ch/de/aktuelles/mistrades</a> <a href="https://www.six-swiss-exchange.com/member_section/newsboard/prod.html">https://www.six-swiss-exchange.com/member_section/newsboard/prod.html</a>
Test	Member Section <a href="https://www.six-swiss-exchange.com/member_section/newsboard/test.html">https://www.six-swiss-exchange.com/member_section/newsboard/test.html</a>

Further information about Mistrades can be found in [Directive 4: Market Control](#).

### 2.2.2.2. On Behalf

Participants of SIX Swiss Exchange are bound to correct erroneous trades in the following cases:

- Irregular Trades  
 If trades which contravene the Rule Book occur accidentally, the involved participants have to request the cancellation of the trades
  
- Erroneous Trade Reports  
 Participants have to request the cancellation of erroneous trade reports; especially in the following cases:
  - a trade has not been negotiated due to legal defects
  - the content of the trade report according to clause 11.1.1 Rule Book is incorrect
  - the trade is not subject to the reporting duty

Both parties involved in the trade have to request the cancellation of the trade at the exchange by using the following form available in the Member Section:

Attribute	Description
Production	<a href="https://www.six-swiss-exchange.com/member_section/cancellation/production.html">https://www.six-swiss-exchange.com/member_section/cancellation/production.html</a> <sup>1)</sup>
Test	<a href="https://www.six-swiss-exchange.com/member_section/cancellation/test.html">https://www.six-swiss-exchange.com/member_section/cancellation/test.html</a>

<sup>1)</sup> Available as of production launch of SMR3

Participants may request multiple cancellations by uploading a file in the Trade Cancellation form on the Member Section. Find below an example file for upload:

ISIN	Trade Date	Trade Match ID
CH0038863350	08.08.2012	12DCA45QF690009B

SIX Swiss Exchange will only perform the trade cancellation if the following trade attributes for both parties are identical:

Attribute	Description
Security ID	ISIN code of the instrument
Trade Date	The date when the trade has been agreed
Trade Match ID	Unique identifier of the trade allocated by the exchange

The cancellation of trades must be requested to SIX Swiss Exchange by the end of the trading day (17:30 CET) following the trade date at the latest.

As a general rule, the exchange will cancel trades «on behalf» until the end of the business day; in case of clearing eligible securities the cancellation of trades will be performed by the end of the clearing day. In exceptional situations SIX Swiss Exchange may extend the period in which cancellations may be requested or else reject to execute cancellations.

SIX Swiss Exchange may charge a fee of CHF 50 per trade cancellation on behalf of participants. Please indicate in the online cancellation form which party shall be charged or whether the fee shall be split between the involved parties.

### 2.2.3. Countertrades

If the trade is not deemed to be a Mistrade by SIX Swiss Exchange and does not classify as an irregular transaction or an erroneous trade report, participants may revert the trade by means of a Countertrade. If both parties bilaterally agree to negate a valid trade, the Countertrade functionality shall be used.

A Countertrade is a trade report with the same trade details as the original trade which is being reversed, but with the trading sides (buy/sell) swapped over. The following additional mandatory attributes shall be set:

Attribute	Value
TrdType	Special Price
OrigTrdMatchID	Trade Match ID of the trade to be corrected

Find further details about Countertrades below:

- The time period after the initial trade in which Countertrades can be reported is unrestricted
- Multiple Countertrades can be reported for the same original trade
- Countertrades are distributed in the market data as regular off order book trades and included in the off order book volume of the Value Added Channel
- Countertrades may be reported via Standard Trading Interface (STI) or via web based Reporting Tool
- Countertrades can only be reported if the counterparty is known
- Countertrades trigger separate clearing and settlement instructions from the original trade

If participants cannot report a Countertrade themselves, SIX Swiss Exchange may perform Countertrades on behalf of participants and charge a fee of CHF 50 per countertrade. The following online request form shall be used to request Countertrades:

Attribute	Description
Production	<a href="https://www.six-swiss-exchange.com/member_section/cancellation/production.html">https://www.six-swiss-exchange.com/member_section/cancellation/production.html</a> <sup>1)</sup>
Test	<a href="https://www.six-swiss-exchange.com/member_section/cancellation/test.html">https://www.six-swiss-exchange.com/member_section/cancellation/test.html</a>

<sup>2)</sup> Available as of production launch of SMR3

Participants may contact Market Control if they wish to perform a Countertrade of a transaction in a security with counterparty anonymity. SIX Swiss Exchange will negotiate between the parties involved in the trade.

## 2.3. Publication

With SWXess Maintenance Release 3 (SMR3) the behaviour for the publication of trades will change. Off order book trades are published immediately by default. If a participant requests delayed publication via Trade Type «Deferred Publication», SIX Swiss Exchange will then validate whether the prerequisites for a delayed publication are met and publish the trade accordingly. The information concerning how a trade is published is included in the Confirmation sent via Standard Trading Interface (STI), as well as in the Trade Reconciliation Report.

Find below an overview of the various trade publication scenarios supported at SIX Swiss Exchange:

Publication Type	Description
Immediate	All on and off order book trades are published immediately except International Bonds.
Deferred ADT	Off order book trades in equities with sufficient volume in relation to the average daily turnover (ADT) and which are conducted between a participant trading on its own account (Principal) and a client of this participant may be published with a delay.
Deferred next business day	The publication of off order book trades in CHF bonds may be delayed until 7:00 CET on the next business day if requested by the participant by the use of the Trade Type «Deferred Publication»
Suppressed	Publication of on and off order book trades in International Bonds is suppressed. Accumulated volumes of trades in International Bonds are published monthly, aggregated by sector.

## 2.4. Trade Types and Trade Flags

The concept of placing various Trade Type Codes in a single field will be decommissioned. SMR3 introduces new dedicated attributes to flag a trade. The following two attributes are distinguished:

- Trade Types are attributes which are set by the participant to denote off order book trades and these Trade Types are regulated by SIX Swiss Exchange.
- Trade Flags are attributes set by the participant or exchange to designate a trade.

Find below an overview of Trade Types and Trade Flags as well as their respective description.

### 2.4.1. Trade Types

Trade Type	Description	Attribute STI	Attribute MDI	Old TTC
Special Price	Specifies a trade report whose price differs from the market price at the time of entry and may be used especially in following cases: <ul style="list-style-type: none"> <li>• VWAP</li> <li>• Portfolio Trade</li> <li>• Countertrade</li> <li>• Reports after emergency situations</li> </ul>	trdType (FIX Tag 828) 30 = <i>Special Price</i>	trdType (FIX Tag 828) 30 = <i>Special Price</i>	D
Deferred Publication	Specifies a trade report which shall be published with a delay.	TradePublishIndicator (FIX Tag 1390) 2 = <i>Deferred Publication</i>	TradePublishIndicator (FIX Tag 1390) 2 = <i>Deferred Publication</i>	DP
Off Exchange	Specifies a trade report which does not fall under the provisions of the Rule Book.	trdSubType (FIX Tag 829) 9001 = <i>Off Exchange</i>	trdSubType (FIX Tag 829) 9001 = <i>Off Exchange</i>	OF

## 2.4.2. Trade Flags

Trade Type	Description	Attribute STI	Attribute MDI	Old TTC
Trade Publication Indicator	Specifies the publication of a trade report. On order book trades are always published immediately.	TradePublishIndicator (FIX Tag 1390) 0 = Do not Publish Trade 1 = Publish Trade 2 = Deferred Publication	publicationIndicator (FIX Tag 1390) 1 = Published Immediately 2 = Deferred Publication	IP SP DP
Trade Sub Type	Specifies further the type of off order book transaction.	trdSubType (FIX Tag 829) 9000 = On Exchange 9001 = Off Exchange 9002 = Delivery Report 9003 = Correction	trdSubType (FIX Tag 829) 9000 = On Exchange 9001 = Off Exchange	OF DR
Last Liquidity Indicator	Specifies whether the party acted as poster, aggressor or whether the trade was done during auction.	LastLiquidityIndicator (FIX Tag 851) 1 = Added Liquidity 2 = Removed Liquidity 3 = Auction	not flagged in MDI	AG
Internal Cross	Specifies whether the trade was an internal nostro cross. Nostro crosses are trades where both involved parties belong to the same legal entity and are acting in their name and on their own account (Principle).	internalCross (FIX Tag 7205) Y = Nostro Cross N = No Nostro Cross	internalCross (FIX tag 7205) Y = Nostro Cross N = No Nostro Cross	NX
Trade Condition	Specifies whether the cancellation was due to a mistrade decision from SIX Swiss Exchange or on behalf of a participant.	TradeCondition (FIX Tag 277) 9002 = On Behalf 9003 = Mistrade	TradeCondition (FIX tag 277) 9003 = Trade Reversal on behalf 9003 = Trade Reversal mistrade	MR
Entry Source	Specifies a trade that has been reported via the SLS undisclosed block trading system at the mid-point price.	EntrySource (FIX Tag 26559) 5 = SLS	MarketSegmentID (FIX tag 1300) LN = Liquidnet Trade	LN

Further details related to the Trade Type and Trade Flags may be found in the Member Section in the document [Standard Trading Interface \(STI\) Specification – Post Trade](#).

## 2.4.3. Exfeed Tariff

According to the price list, SIX Exfeed generally charges exchange fees for registered users that receive real-time pre- and post-trade data from SIX Swiss Exchange markets. Vendors and sub-vendors are only allowed to disseminate real-time data to subscribers in closed user groups.

However, SIX Exfeed also offers an alternative fee model for corporate e-Banking providers which are also SIX Swiss Exchange participants offering order routing applications in combination with real-time data. This «transaction model» is based on the number of executed trades instead of the number of individual users. Participants must tag each order insertion via e-Banking with a specific trade type in the following FIX attributes:

Trade Type	FIX Tag	Possible Values
On order book	6520 – TradeTypeCodeList	«Z1» for non-professional e-banking end users
Off order book	6577 – Tariff	«Z2» for professional e-banking end users

Please contact SIX Exfeed (+41 58 399 2977 or [data-services@six-swiss-exchange.com](mailto:data-services@six-swiss-exchange.com)) if you have further questions.

## 2.5. Clearing and Settlement

### 2.5.1. Clearing Rules

In the current post-trade system the routing of clearing and settlement instructions from the exchange is defined at the level of legal entity and is determined by up to twelve characteristics of the given trade. With the introduction of SMR3 clearing rules are now defined per participant (party) and the routing of clearing and settlement instructions may be based on the following attributes of a trade:

Attribute	Description
Participant	The party identification of the trading participant
Clearing Settlement Segment	The Clearing Settlement Segment to which the security has been assigned
Capacity	Order Capacity (Principal / Riskless Principal)

### 2.5.2. Downgrading of Settlement Types

Problems with clearing and settlement instructions will no longer lead to the rejection of a off order book trade. Instead the Settlement Type of a trade will be downgraded. This behaviour will allow the participants to report off order book trades in an efficient way.

Below a list of the most frequent cases where the Settlement Type would be downgraded:

Settlement Type	Description
Downgrading from CCP to Bilateral Settlement	Settlement Type is downgraded if <ul style="list-style-type: none"><li>Trade was reported outside Clearing Day (08:00 – 18:15)</li><li>Security is not eligible for clearing</li><li>Trade Date is not the current business day</li></ul>
Downgrading from Bilateral Settlement to Manual	Settlement Type is downgraded if <ul style="list-style-type: none"><li>Security is not settlement eligible at SIS</li><li>Counterparty is not a trading participant of SIX Swiss Exchange</li><li>Settlement date is a non-settlement day (weekend or currency holiday)</li><li>Settlement date is outside of the standard settlement cycle of the security</li></ul>

Information concerning the Settlement Type and its reason is included in the Confirmation Message distributed via Standard Trading Interface (STI).

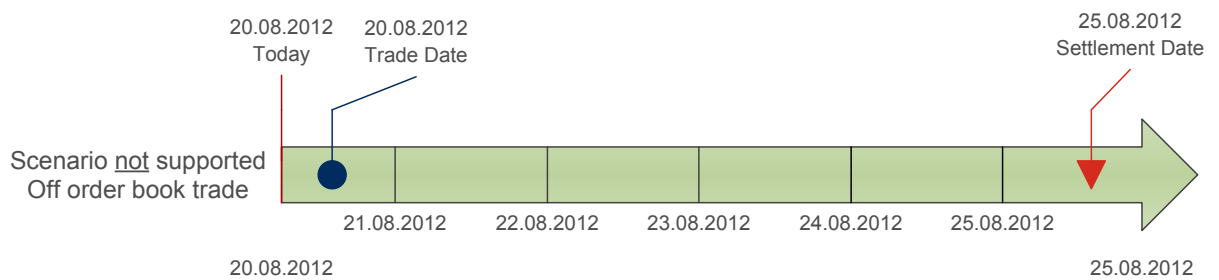
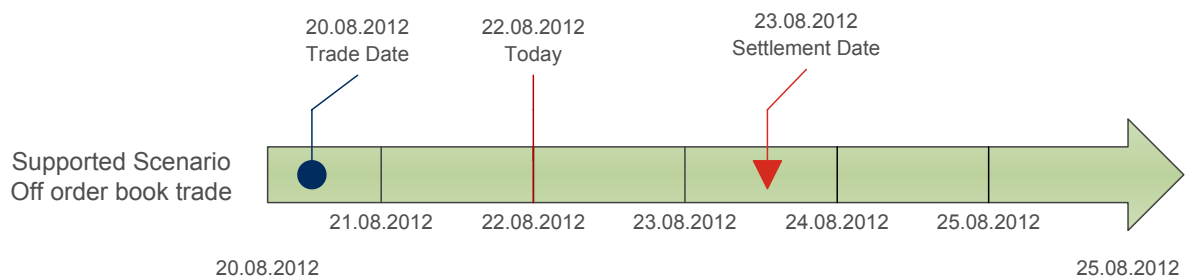
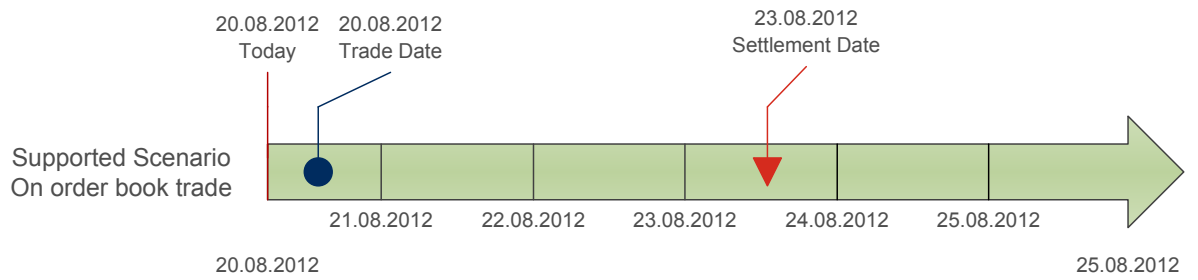
Note that in exceptional cases SIX Swiss Exchange may downgrade a Settlement Type manually.

### 2.5.3. Instruction of Clearing and Settlement and Calculation of Accrued Interest

Clearing and Settlement is generally instructed by SIX Swiss Exchange if the trade date and settlement date is within the settlement cycle of the instrument.

Accrued Interest will only be calculated if the nominal and interest payment currencies are the same and the value date of the trade is within the standard settlement cycle of the instrument.

Find below some examples:



### 2.5.4. Confirmations

Confirmations (Trade Slips) will no longer be generated individually for each involved party. All parties on the same side of the trade will receive the same «Confirmation».

The party identification of the General Clearing Member (GCM) used by a trading party will be present on the Confirmation (Clearing Organisation Party).

In order to increase transparency, the following attributes are available on the Confirmation via Standard Trading Interface (STI) to provide participants information about the clearing and settlement status of a trade and transaction type:

Attribute	Description
SegrClearingAccountType	Indicates which segregated clearing account type has been used (if appropriate)
ConfirmReason	Gives the reason for the Confirmation message being sent
SettlementType	Indicates whether the trade will be cleared and settled, settled only or whether the participants will need to instruct the trade themselves
SettlementStatusCode	Indicates the settlement status of the trade
SettlementTypeReason	Indicates the reason for the Settlement Type
Business Transaction Type	Indicates the type of an order that lead to the trade or how the trade report was matched
Entry Source	Indicates the interface via which the order or trade has been submitted



More details in terms of available attributes and possible values of the Confirmation may be found in the document [Standard Trading Interface \(STI\) – Specification Post Trade](#) in section 3.6.

Furthermore with SMR3 participants may define on a Trading Segment level for which trades they wish to receive Confirmations. Please contact Member Services if you wish to modify your Confirmation message settings.

## 2.6. Market Data

### 2.6.1. Reference Price

As a general rule the Reference Price is set by the most recent on order book trade. In various cases SIX Swiss Exchange may adjust the Reference Price. Find below an overview of the Reference Price adjustments:

Reference Price Adjustment	Description	MDI - Reference Price Type (FIX 6567)
Initial	The initial reference price set during the listing of a product before the first trading day. Note that the initial price may be manually adjusted before the first trading day.	6 - Initial Price
Last	Last paid price is derived from last executed on order book trade.	3 - Last Paid Price
Inside Market	Inside market price is set if the reference price is outside of the closing inside market and if no on order book trade was executed during trading hours. If the current reference price is lower than the best bid, then the reference price is adjusted to the best bid. If the current reference price is higher than the best ask, then the reference price is adjusted to the best ask. If no closing no bid or ask prices are in the order book at the closing, no reference price adjustment will occur. The Inside Market adjustment will be performed after end of trading.	7 - Inside Market Price
Manual	Manual adjustment is set as reference price type if the price has been manually adjusted by SIX Swiss Exchange (e.g. in case of capital events etc.). Manual reference price adjustments may be performed by SIX Swiss Exchange during the business day whenever the security is not in trading status «Continuous trading».	2 - Manual Adjustment
Dividend	Dividend adjustment is set if a dividend is being paid for a security in the security's trading currency. On the ex dividend date the reference price is adjusted by the dividend amount before the start of trading.	0 - Dividend Adjusted Price
Price Step	Price Step adjustment is set if the price step group for a security has been modified. The reference price is adjusted before the start of trading, if it does not conform with the new price step.	5 - Price Step Adjusted Price
Mistrade	If the trade which lead to the reference price was a mistrade and has been cancelled by SIX Swiss Exchange, then Mistrade adjustment is performed as follows: if a valid on book trade occurred during trading before or with the mistrade, then the reference price is set to the last on order book paid price before the cancellation. If no valid on order book trade occurred during trading, then the reference price is adjusted to the reference price valid before the start of trading, followed by an adjustment according to the Inside Market Price logic. The mistrade adjustment will be executed after end of trading.	4 - Mistrade Adjustment
On Behalf	If the trade which lead to the reference price was a cancelled on behalf of a participant. On Behalf adjustment is performed as follows: if a valid on book trade occurred during trading hours on the same business day before or with the cancelled trade, then the reference price is set to the last on order book paid price before the cancellation. If no valid on order book trade has occurred during trading hours on the same business day, then the reference price is adjusted to the reference price valid before the start of trading, followed by an adjustment according to the Inside Market Price logic. The on behalf adjustment will be executed after end of trading.	8 - On Behalf Reversal Adjustment

## 2.6.2. Value Added Channel

In addition to the existing daily «Recapitulation File» SIX Swiss Exchange will introduce a new Value Added Channel for statistical market data over Market Data Interface (MDI). More information may be found in the document [Market Data Interface \(MDI\) – Specification](#) (please refer to section 5.9).

Below is a summary of the new Value Added Channel prepared for your convenience:

- The Value Added Channel distributes the data at regular intervals per security
- During trading hours the statistical data will only be available for securities which have traded on order book or off order book. No reference or closing price is provided
- After end of trading, statistical data will be sent for all securities, including the reference and closing price
- If during trading hours no trades occur in a security, the reference and closing price from the previous business day will be distributed

At scheduled times during the day (typically every hour starting from the opening until after end of business) a single reconciliation file containing the recapitulation of the value added data for the day will be available. The final «Recapitulation File» will be available at 22:10 CET.

## 2.6.3. Market Data Channel Changes

With SMR3 all off order book trades for all securities will be distributed via a single market data channel. Furthermore the on and off order book channels will include Trade Match ID.

Find below an overview of the market data channels for trade information:

Type	Channel ID	Channel Name	Channel Type
On- and off order book post trade channels	ONBTRD-011	On Book Trades Equities	ON
	ONBTRD-012	On Book Trades Non-Equities	ON
	OFBTRD-021	Off Book Trades	OF

A detailed configuration of the [MDI Channels](#) is available in the Member Section.

## 2.7. Reference Data Structure

### 2.7.1. Trading Segment

A new attribute «Trading Segment» will be introduced on a security level. Trading Segment will be used for the configuration of trading- and reporting-relevant attributes. The following attributes of the Trading Segment will be displayed in the TradedInstrument file of Reference Data Interface (RDI):

Attribute	Description
tradingSegmentId	Used on the trade to identify the group of securities with common trading rules to which the security belongs.
tradingSegmentDescription	The description of the Trading Segment

Find below the current configuration for Trading Segment:

ID	Description	Market Code	Partition	Trade Reporting Allowed	Post-Trade Anonymity	Publication
26	Blue Chip Shares	XVTX	P1	Yes	Yes	Deferred ADT
32	OTE - SLS - CH (XVTX)	XVTX	SLS	No	Yes	Immediate
580	Scoach Derivatives	XQMH	P2	Yes	No	Immediate
581	International Bonds	XSWX	P2	Yes	No	Suppressed
582	International Bonds Min Denom	XSWX	P2	Yes	No	Suppressed
583	International Bonds Convertible	XSWX	P2	Yes	No	Suppressed
584	ETF	XSWX	P2	Yes	No	Immediate
585	ETF on Swiss Confederation Bonds	XSWX	P2	Yes	No	Immediate
586	ETSF	XSWX	P2	Yes	No	Immediate
588	ETP	XSWX	P2	Yes	No	Immediate
589	Swiss Confederation Bonds CHF	XSWX	P2	Yes	No	Deferred next business day
590	Bonds CHF	XSWX	P2	Yes	No	Deferred next business day
591	Mid-/Small-Cap Shares	XSWX	P1	Yes	No	Deferred ADT
592	Secondary Listing Shares	XSWX	P1	Yes	No	Deferred ADT
594	Investment Funds	XSWX	P1	Yes	No	Deferred ADT
595	Derivatives non-quoted	XSWX	P1	Yes	No	Immediate
596	Convertible and Warrant Bonds CHF	XSWX	P2	Yes	No	Deferred next business day
597	Separate Trading Lines	XSWX	P1	No	No	Immediate
598	Rights	XSWX	P1	Yes	No	Immediate
599	OTE - SLS - CH (XSWX)	XSWX	SLS	No	Yes	Immediate
600	OTE - SLS – DE	XSWX	SLS	No	Yes	Immediate
601	OTE - SLS – FR	XSWX	SLS	No	Yes	Immediate
602	OTE - SLS – NL	XSWX	SLS	No	Yes	Immediate
603	OTE - SLS – UK	XSWX	SLS	No	Yes	Immediate
604	OTE - SLS – AT	XSWX	SLS	No	Yes	Immediate
605	OTE - SLS – BE	XSWX	SLS	No	Yes	Immediate
606	OTE - SLS – DK	XSWX	SLS	No	Yes	Immediate
607	OTE - SLS – FI	XSWX	SLS	No	Yes	Immediate
610	OTE - SLS – PT	XSWX	SLS	No	Yes	Immediate
611	OTE - SLS – SE	XSWX	SLS	No	Yes	Immediate

Note that any change of the Trading Segment of a security leads to the delisting and re-listing of the respective security. A consequence of delisting is the deletion of all orders from the order books.

Please refer to the document [Reference Data Interface \(RDI\) – Specification](#) in the Member Section and the [Trading Guides](#) on the website of SIX Swiss Exchange or Scoach for further details.

### 2.7.2. Clearing Settlement Segment

A new attribute «Clearing Settlement Segment» will be introduced on a security level. Clearing Settlement Segment will be used for the configuration of clearing and settlement relevant attributes. The following attributes of the Clearing Settlement Segment will be displayed in the TradedInstrument file of the Reference Data Interface (RDI):

Attribute	Description
clearingSettlementSegmentCode	Used to identify the group of securities with common clearing and settlement behaviour to which the security belongs.
clearingSettlementSegmentDescription	The description of the Clearing Settlement Segment

The current configuration for the «Clearing Settlement Segment» has been setup as follow:

Code	Description	Clearing eligible	Settlement eligible	Settlement Cycle
BCCS	Shares Blue Chips (cleared both CCPs)	Yes	Yes	T+3
BOCS	Bonds CHF (cleared by one CCP)	Yes	Yes	T+3
BOMA	Bonds CHF (manual)	No	No	T+3
BONC	Bonds CHF (not cleared)	No	Yes	T+3
DENC	Scoach Derivatives (not cleared)	No	Yes	T+3
ETCS	Exchange Traded Prod (cleared both CCPs)	Yes	Yes	T+3
ETNC	Exchange Traded Prod (not cleared)	No	Yes	T+3
IBMA	International Bonds (manual)	No	No	T+3
IBNC	International Bonds (not cleared)	No	Yes	T+3
MSCS	Mid-/Small Caps (cleared both CCPs)	Yes	Yes	T+3
OXAT	Over the Exchange – AT	Yes	No	T+3
OXBE	Over the Exchange – BE	Yes	No	T+3
OXDE	Over the Exchange – DE	Yes	No	T+2
OXDK	Over the Exchange – DK	Yes	No	T+3
OXFI	Over the Exchange – FI	Yes	No	T+3
OXFR	Over the Exchange – FR	Yes	No	T+3
OXNL	Over the Exchange – NL	Yes	No	T+3
OXPT	Over the Exchange – PT	Yes	No	T+3
OXSE	Over the Exchange – SE	Yes	No	T+3
OXUK	Over the Exchange – UK	Yes	No	T+3
SHMA	Shares and Funds (manual)	No	No	T+3
SHNC	Shares and Funds (not cleared)	No	Yes	T+3

Blue Chip Shares and Mid-/Small Cap Shares which are also eligible for trading via SIX Swiss Exchange Liquidnet Service (SLS) must be cleared and settled like corresponding trades executed on the On Book Matcher (OBM), as they do not have a separate Clearing and Settlement Segment.

Note that Clearing and Settlement Segment of a security may be changed intraday by the exchange in extraordinary situations.

Further details have been outlined in the document [Reference Data Interface \(RDI\) – Specification](#).

### 2.7.3. Significant Price Decimals

In order to facilitate the price tick size calculation for order entry via OUCH Trading Interface (OTI) the following new attribute has been introduced:

Attribute	Description
significantPriceDecimals	Number of decimal places which have been defined for the price of the traded instrument.

This attribute will be available in the «TradedInstrmt» file of Reference Data Interface (RDI).

## 2.7.4. Decommissioned Reference Data

The following attributes have been decommissioned and will therefore no longer be distributed via Reference Data Interface (RDI):

Attribute	Description
clearingOrg	The code of a clearing organisation. A clearing organisation was a predefined automated settlement link. Each link offers a combination of supported CSDs, CCPs and settlement currencies.
inDefaultFromDate	The date from which no more interest payments are expected as a result of default of the company issuing the debt. No accrued interest is paid for trades occurring on or after this date (if set).
tradeDateBasedInterestFlag	Indication of whether the accrued interest is to be calculated based on the trade date or on the settlement date.

## 2.7.5. Change Fix

SIX Swiss Exchange will no longer provide [Change Fix](#) for all tradable currencies with SMR3 because no conversion for clearing and settlement is required anymore.

## 2.8. Reference Data Changes

### 2.8.1. Foreign Interest Payment Securities (FIPS)

With SMR3 any bond for which the nominal currency and interest currencies differ will be traded flat (without accrued interest). The coupons designated in the reference data of SIX Swiss Exchange must still be transferred with the bonds themselves in such cases. The securities are flagged as «flat» in the exchange system.

Due to this change accrued interest will no longer be calculated for the following Foreign Interest Payment Securities (FIPS):

Description	Symbol	ISIN	Valor	Nominal Currency	Interest Currency
4.625 NIB FI86-9999	NIB86	CH0004724545	472454	CHF	USD
4.125 PEPSI 86-9999	PEP86	CH0008941319	894131	CHF	USD
4.75 SOU CA86-9999	SOU862	CH0008977131	897713	CHF	USD
4.25 STO 86-9999	STO86	CH0008982974	898297	CHF	USD

(Effective date 24 August 2012)

Participants will have the possibility to test this new configuration during the Membertest phase.

### 2.8.2. Swiss Pfandbriefe

SIX Swiss Exchange has decided to modify the trading parameters of Swiss Pfandbriefe with the launch of SMR3 and align them with the Swiss Government Bonds (Eidgenossen).

All bonds of the «Pfandbriefzentrale der schweizerischen Kantonalbanken» and «Pfandbriefbank schweizerischer Hypothekarinstitute» will be adjusted as follows:

Parameter	Old values	New values
Price Steps	0.05% (independent of market price) <i>Maturity &lt; 18 Months</i> 0.01% (independent of market price)	0.01% (independent of market price)

Parameter	Old values	New values
Stop Trading	2% for 15 min	1% for 15 min
Delay Opening	<i>Volatile Securities<sup>1)</sup></i> 10% for 5 min  <i>Maturity &gt; 15 years</i> 3% for 15 min	  <i>Maturity &gt; 15 years</i> 3% for 15 min

<sup>1)</sup> Instruments with a reference price smaller than 10%.

Participants will have the possibility to test this new configuration during the Membertest phase.

### 2.8.3. SIX Swiss Exchange Liquidnet Service (SLS)

SIX Swiss Exchange will introduce a Participant Authorisation on a Trading Segment level. This functionality allows SIX Swiss Exchange to define trading authorisation for Trading Segments per participant.

As a consequence of this, all trading participants of SIX Swiss Exchange will by default be setup for trading **Swiss securities** on SIX Swiss Exchange Liquidnet Service (SLS). This change will have no impact on the participant from a post-processing perspective because all trading participants of SIX Swiss Exchange have the necessary instructions for the clearing and settlement of Swiss securities in place.

Furthermore, this enhancement allows participants to use the dark pool service SLS which executes trades at the mid-point price of the reference exchange only for the markets the wish to trade in. Please contact your Account Manger if you wish to commence trading in a selection of SLS markets.

### 2.9. Trade Reconciliation Report (TRR)

In order to facilitate the daily reconciliation of trades and their status a new Trade Reconciliation Report will be distributed to participants. In contrast to the current FIX reconciliation file, the new report will be provided in an easily readable format.

The Trade Reconciliation Report includes all matched, unmatched and cancelled trade legs (on and off order book) submitted by a participant which were generated or reported on the given business day. The reconciliation report will only be available for trading participants of SIX Swiss Exchange and Reporting Members. Settlement Agents (SAG), General Clearing Members (GCM) and Central Counterparties (CCP) will not receive the reconciliation report.

A first version of the daily trade reconciliation report will be made available to the participant at 17:45 CET. The final version of the Trade Reconciliation Report can be downloaded from the start of the next business day. The daily report may be downloaded automatically (using curl) or manually via SIX Swiss Exchange Reporting GUI.

The document [Participant Trade Reconciliation Report - Specification](#) which available in the Member Section has more details, in case this is required.

As of SMR3 all participants are currently using the Reconciliation File will automatically be setup for the new Trade Reconciliation Report solution via the Member Section. Other participants wishing to obtain Trade Reconciliation Reports should configure the access via the Member Section. In order to view the Trade Reconciliation Report the permissions to access «view trade reconciliation files» have to be set.

Please contact Technical Production Support if you have any further questions in this regard.

### 3. Upgrade of On Book Matcher (OBM) to X-stream INET

SIX Swiss Exchange is upgrading of the On Book Matchers (OBM) to the new «X-stream INET» technology with lower latency and higher transaction capacity in a staged approach.

#### 3.1. Upgrade of X-stream INET on OBM Partition 1 «Equities» (SMR2)

In April 2012 with [SWXess Maintenance Release 2 \(SMR2\)](#) SIX Swiss Exchange introduced the «X-stream INET» system on Partition 1 «Equities» of the On Book Matcher (OBM) as well as a Co-Location service which provides market participants hugely lower latency times and a significantly higher equity trading transaction capacity.

Additionally the two new high-performance OUCH Trading Interface (OTI) and ITCH Market Data Interface (IMI) have been introduced which deliver maximum possible throughput and low latency.

#### 3.2. Technical upgrade of X-stream INET on OBM Partition 2 «Non-Equities» (SMR3)

SIX Swiss Exchange has now decided to upgrade the On Book Matcher (OBM) - Partition 2 «Non-Equities» to the same «X-stream INET» release already in operation for OBM Partition 1 «Equities». Please note that the derivatives market «Scoach Switzerland» is also part of this change. This technical upgrade with SMR3 is a preparatory step for the functional upgrade of OBM – Partition 2 «Non-Equities» which will be rolled out with a SWXess Maintenance Release in 2013.

The upgrade will be transparent to participants as the «OUCH Trading Interface» (OTI) and «ITCH Market Data Interface» (IMI) will not be made available with this upgrade. The matcher will be relocated to the Equinix Co-Location data centre. Co-Location Access will not yet be supported on OBM - Partition 2 «Non-Equities» and for the time being OBM - Partition 2 «Non-Equities» is only accessible via SIX Swiss Exchange Common Access Portal (SCAP) over Proximity, Optical, Ethernet or Managed IP connection.

For further information on the technical upgrade of On Book Matcher (OBM) - Partition 2 «Non-Equities» please refer to [MSC Message No. 46/2012](#) and the document [Release Notes for SWXess Maintenance Release 3 \(SMR3\)](#) in the Member Section.

The following interfaces are not functionally or technically affected by SMR3:

- Capacity Trading Interface (CTI)
- OUCH Trading Interface (OTI)
- ITCH Market Data Interface (IMI)

#### 3.3. Functional upgrade of X-stream INET on OBM Partition 2 «Non-Equities» (SMRx)

SIX Swiss Exchange will upgrade the functions of the On Book Matcher - Partition 2 «Non-Equities» with a SWXess Maintenance Release planned for 2013.

This planned upgrade will include the following main functional enhancements for OBM – Partition 2 «Non-Equities»:

- Introduction of OUCH Trading Interface (OTI) and ITCH Market Data Interface (IMI)
- Co-Location Service

Further details about the functional upgrade of OBM – Partition 2 «Non-Equities» will be published in due course.

## 4. Migration

The upgrade to SWXess Maintenance Release 3 (SMR3) requires the migration of reference data as well as various configuration changes. SIX Swiss Exchange will ensure that the migration footprint on the participants is as minimal as possible.

Further details about the migration and the required technical configuration changes may be found in the [Guide for Member Migration to SWXess Maintenance Release 3](#) available in the Member Section.

### 4.1. Transactional Data

#### 4.1.1. Orders

All order books (including order books from the Scoach market) will be migrated to SMR3 by SIX Swiss Exchange. No active orders will be deleted from the order books. The participants will receive Execution Reports on Monday after the migration for all active orders.

#### 4.1.2. Trades

The on and off order book trades will not be migrated to SMR3. As a consequence on Monday after the migration no corrections or cancellations of trades executed on the Friday before migration may be performed. Participants shall report Countertrades in these cases.

Off order book trades which have been reported before the migration to SMR3 with delayed publication after the migration will not be published via Market Data Interface (MDI).

#### 4.1.3. Reference and Closing Prices

Reference and Closing Prices will be automatically migrated to SMR3. Note that all Reference Prices of the type «Input Price» will be migrated with the Reference Price Type «Manual Adjustment». Securities which have their first listed date on the Monday after the migration will have the Reference Price Type «Initial Price».

### 4.2. Security Reference Data

The following modifications to security reference data are required for the migration to SMR3. Note that these data changes will be available during the entire test phase for participants to test the new behaviour. In the production environment these changes will be effective on the first trading day of SMR3.

#### 4.2.1. SLS Securities

For every security which is eligible for trading on SIX Swiss Exchange via the On Book Matcher (OBM) as well as via SIX Swiss Exchange Liquidnet Service (SLS) a new security will be created. The security which is currently available will be migrated as the OBM-eligible security, whereas the newly setup instance of the same security will be the SLS-eligible security.



Note that in general both securities will have the same reference data, except for the following attributes which differ between the services:

Attribute	Value for OBM	Value for SLS
Listing Type	Listing Segment of security (e.g. HS – Main Segment)	OX – Over the Exchange
Trading Segment	26 Blue Chip Shares 591 Mid-/Small-Cap Shares	32 OTE – SLS- CH (XVTX) 599 OTE - SLS - CH (XSWX)

#### 4.2.2. Foreign Interest Payment Securities

All Foreign Interest Payment Securities (FIPS) will be modified to «No accrued interest» flat.

#### 4.2.3. Swiss Pfandbriefe

All Swiss Pfandbriefe will be modified as follows:

Attribute	Value old	Value new
Stop Trading Category	56 – Bonds (2% / 15min) Other	55 - Bonds (1.0% / 15min) Other
Price Step Group	BO - Bonds	PF - Pfandbriefe

Note that the Stop Trading Category will not be changed for Pfandbriefe which have a Maturity >15 years. These Pfandbriefe keep their Stop Trading Category 57 – Bonds (3.0% / 15min) Other.

### 4.3. Participant Reference Data

#### 4.3.1. Participants Trading Authorisation

For all trading participants of SIX Swiss Exchange the participant authorisation will be initially set as follows:

- As a general rule all participants will receive trading access to all Trading Segments tradable via the On Book Matcher (OBM) as well as the Swiss Markets of SLS.
- Participants which clear via London Clearing House (LCH) will not receive trading access for any Trading Segments of CHF Bonds
- Participants which already have all clearing and settlement instructions for SLS in place will receive access to all Trading Segments.

Please contact Member Services if you have questions in regards to your trading authorisation.

#### 4.3.2. Clearing and Settlement Configuration

As a general rule the current clearing and settlement configuration for participants will be migrated to SMR3. Find below further details:

- Clearing Rules and CSSI
  - For Participants Clearing Rules and Clearing Settlement Standing Instructions (CSSI) have been migrated using the production data and this is now the configuration available in the test environment.
  - For ISVs and ASPs the configuration from the test system has been migrated

- Prevention
  - Clearing & Settlement Prevention from the production environment has been migrated to the test environment.
- Confirmation Subscription
  - All Trading Participants, Settlement Agents and General Clearing Members will receive Confirmations for all trades in Trading Segments if a FIX Connection is configured.

Participants which currently have routing instructions for clearing and settlement based upon a Bank Internal Reference have been setup with a general clearing and settlement configuration from production. The affected participants have been contacted by Member Services and the reconfiguration of the clearing and settlement setup is ongoing. Note that in order to ensure production readiness the clearing and settlement configuration must be completed two weeks before the production go live date.

Please contact Member Services if you wish to change your Clearing and Settlement configuration or if you need assistance in this regard.

## 5. Test Phase

Before the introduction of SWXess Maintenance Release 3 (SMR3) in the production environment, participants have the possibility to test the new and changed functionality in the test environment for approximately 8 weeks.

We strongly recommend that all participants, ASPs and ISVs test their Member Own Applications including their back-office workflows during the test phase. The main focus of the Membertest phase is to verify the changes to the business functionality especially in regards to reporting and post-trade processing. In order to support the testing activities for members SIX Swiss Exchange strongly recommends members to execute the test cases defined in section 5 during the test phase.

The participants are kindly requested to provide feedback to Member Services via e-mail when their testing activities have been completed.

Trading hours and the Membertest availability may be found under the following links:

Attribute	Description
Environment Calendar	<a href="http://www.six-swiss-exchange.com/participants/participation/environment_calendar_en.html">http://www.six-swiss-exchange.com/participants/participation/environment_calendar_en.html</a>
Trading Hours	<a href="http://www.six-swiss-exchange.com/member_section/download/public/Trading_Hours_Membertest.pdf">http://www.six-swiss-exchange.com/member_section/download/public/Trading_Hours_Membertest.pdf</a>

Further details about the Membertest phase have been provided in the [MSC Message No. 49/2012](#).

### 5.1. Test Scenarios

#### 5.1.1. Reporting

For testing off order book functionality (e.g. two-sided trade reports) an automated counterparty service has been setup. This service is available with Counterparty ID 7075 and available during business hours.

Scenario	Description	Comments
One-sided Trade Report	1. Participant A submits one-sided trade report	
Two-sided Trade Report (Enter / Accept)	1. Participant A enters first leg of a two-sided trade report 2. Participant B accepts it	
Two-sided Trade Report (Match)	1. Participant A enters first leg of a two-sided trade report 2. Participant B enters second leg of a two-sided trade report	Trade Details must be identical to match
Two-sided Trade Report (Delete)	1. Participant A submits first leg of a two-sided trade report 2. Participant A deletes first leg of a two-sided trade report before it is accepted or matched	
Two-sided Trade Report (Unconfirmed)	1. Participant A submits first leg of a two-sided trade report	Unconfirmed two-sided trade reports will not expire at the end of the business day.
Two-sided Trade Report (with Reporting Member)	1. Participant A enters first leg of a two-sided trade report 2. Reporting Member B enters second leg of two-sided trade report or accepts it	No automatic settlement
Counter Trade	1. Participant A executes a trade <ul style="list-style-type: none"> <li>• On-book trade</li> <li>• One-sided trade report</li> <li>• Two-sided trade report</li> </ul> 2. Participant A submits a Counter Trade	Trade ID of original trade must be indicated on the counter trade.  TrdType = 30 (Special Price) must be set on the counter trade.
Capacity Correction	1. Participant A executes a trade <ul style="list-style-type: none"> <li>• On-book trade</li> <li>• One-sided trade report</li> <li>• Two-sided trade report</li> </ul> 2. Participant A corrects capacity of executed trade	Trade ID of original trade must be indicated on the capacity correction

Scenario	Description	Comments
Transaction Report (Reporting GUI)	1. Participant A submits a Transaction Report via web based Reporting Tool	
Transaction Report (File Interface)	2. Participant A uploads multiple Transaction Reports via Transaction File Interface (TFI)	

### 5.1.2. Mistrades & On-Behalf Transactions

Mistrade Decisions may be requested from SIX Swiss Exchange Market Control (+41 58 399 2475 or [helpdesk.exc@six-swiss-exchange.com](mailto:helpdesk.exc@six-swiss-exchange.com)).

On-Behalf Cancellations and Countertrades can be requested from SIX Swiss Exchange Market Control through the newly introduced [application form](#) in the Member Section.

Scenario	Description	Comments
Mistrade Decision (Cancellation)	1. Participant A executes a trade <ul style="list-style-type: none"> <li>• On-book trade</li> <li>• One-sided trade report</li> <li>• Two-sided trade report</li> <li>• SLS trade</li> </ul> 2. Participant A requests a mistrade decision (cancellation) from SIX Swiss Exchange	
Mistrade Decision (Cancellation) on T+1	1. Participant A executes a trade on T <ul style="list-style-type: none"> <li>• On-book trade</li> <li>• One-sided trade report</li> <li>• Two-sided trade report</li> </ul> 2. Participant A requests a mistrade decision (cancellation) from SIX Swiss Exchange on T+1	
On-Behalf Cancellation	1. Participant A executes a trade <ul style="list-style-type: none"> <li>• On-book trade</li> <li>• One-sided trade report</li> <li>• Two-sided trade report</li> <li>• SLS trade</li> </ul> 2. Participant A requests an on-behalf cancellation from SIX Swiss Exchange	
On-Behalf Cancellation on T+1	1. Participant A executes a trade on T <ul style="list-style-type: none"> <li>• On-book trade</li> <li>• One-sided trade report</li> <li>• Two-sided trade report</li> </ul> 2. Participant A requests an on-behalf cancellation from SIX Swiss Exchange on T+1	Clearing&Settlement might be downgraded
On-Behalf Counter Trade	1. Participant A executes a trade <ul style="list-style-type: none"> <li>• On-book trade</li> <li>• One-sided trade report</li> <li>• Two-sided trade report</li> <li>• SLS trade</li> </ul> 2. Participant A requests a counter trade from SIX Swiss Exchange	
On-Behalf Counter Trade on T+ 1 or later	1. Participant A executes a trade on T <ul style="list-style-type: none"> <li>• On-book trade</li> <li>• One-sided trade report</li> <li>• Two-sided trade report</li> </ul> 2. Participant A requests a counter trade from SIX Swiss Exchange on T+1 or later	Clearing&Settlement might be downgraded

### 5.1.3. Trade Types

Scenario	Scenario Description	Comments
Deferred Publication (Equities)	1. Participant A submits a trade report in an equity and requests deferred publication (based on ADT). <ul style="list-style-type: none"> <li>One-sided trade report</li> <li>Two-sided trade report</li> </ul>	By default trades are published immediately. Participants need to request deferred publication (TradePublishIndicator).  If conditions are met, the publication of the trade will be deferred.
Deferred Publication (Bonds)	1. Participant A submits a trade report in a CHF Bond and requests deferred publication (before opening on the following trading day). <ul style="list-style-type: none"> <li>One-sided trade report</li> <li>Two-sided trade report</li> </ul>	By default trades are published immediately. Participants need to request deferred publication (TradePublishIndicator).  If conditions are met, the publication of the trade will be deferred.
Off Exchange	1. Participant A submits a trade report and flags it as Off Exchange <ul style="list-style-type: none"> <li>One-sided trade report</li> <li>Two-sided trade report</li> </ul>	TrdSubType = 9001 (Off Exchange)
Delivery Report	1. Participant A submits a two-sided trade report and flags it as Delivery Report. Additional a Commission amount is defined	TrdSubType = 9003 (Delivery Report)

### 5.1.4. Clearing & Settlement

We strongly recommend that participants perform detailed end-to-end tests of on and off order book trades in all trading segments and validate that clearing and settlement is correctly instructed by the Exchange.

Additionally we recommend that participants execute the following special cases for clearing and settlement:

Scenario	Scenario Description	Comments
Trade Report Outside Clearing Hours	1. Participant A submits a trade report either before 08:00 CET or after 18:15 CET <ul style="list-style-type: none"> <li>Two-sided trade report</li> </ul>	Clearing Instructions of trade report will be downgraded to «Exclude from CCP»
Trade Report from T-1	1. Participant A submits a trade report with Agreed Date & Time of T-1 or T-2 <ul style="list-style-type: none"> <li>Two-sided trade report</li> </ul>	Clearing Instructions of trade report will be downgraded to «Exclude from CCP»
Trade Report with invalid Settlement Date	1. Participant A submits a trade report requesting a settlement date which is either a currency holiday or a weekend <ul style="list-style-type: none"> <li>Two-sided trade report</li> </ul>	Clearing Instructions of trade report will be downgraded to «Manual Mode»
Trade Report with Settlement Date outside of standard settlement on T-1	1. Participant A submits a trade report with Agreed Date & Time equal T-1 and requesting settlement date further in the future than T+3 <ul style="list-style-type: none"> <li>Two-sided trade report</li> </ul> <i>E.g. Transaction Date: 15.08.2012</i> <i>Agreed Date: 13.08.2012</i> <i>reqSettlDate: 17.08.2012</i>	Clearing Instructions of trade report will be downgraded to «Manual Mode»
Held Back Trade	1. Participant A enters an on-order book order 2. SIX Swiss Exchange Member Services is suspending Participant A 3. Participant B enters an on-order book order to match the order of Participant A 4. Participant A request to be unsuspending and reprocessing of the held back trade form SIX Swiss Exchange Member Services	SIX Swiss Exchange Member Services  +41 (0)58 399 2473 or <a href="mailto:member.services@six-group.com">member.services@six-group.com</a>

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