Trading on SIX Swiss Exchange

Preparatory Examination Documentation for Traders

Module Trading

July 2025

Sensitivity: C1 Public

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1 Introduction

SIX Swiss Exchange AG's (SIX Swiss Exchange) trader training and testing programmes set high standards in respect of quality and customer orientation. They ensure that traders possess the requisite knowledge for trading in securities, thereby ensuring a smooth trading process. These programmes are primarily available to traders of participants and reporting members. The SIX Swiss Exchange Member Education Team coordinates and oversees the training and examination programmes. Traders benefit from the real-world professional knowledge of experts from other departments of the Exchange. The training programme is designed for all SIX Swiss Exchange traders, with or without a SIX Swiss Exchange-recognised licence, who wish to obtain this professional qualification. Classes are held on SIX Swiss Exchange premises (Zurich and London). On request they can also be held at the customer's premises outside Switzerland. Comprehensive preparatory materials and an online sample test are available so that participants can prepare for the examination through self-study.

The web-based testing application enables traders to sit for the modular trader examination at the premises of SIX Swiss Exchange participants. The test can be taken at any time, and participants can choose to hold examinations for individuals or groups. Once the examination is finished, the trader can immediately view and print out the result. Reporting members' traders sit the examination at the SIX Swiss Exchange premises.

A trader's licence will expire if they remain unregistered for two years. When renewing their registration, traders are required to pass the trader examination again.

1.1 Trader Examination

The trader exam comprises 50 questions and lasts a maximum of one hour. The exam includes questions on the module ‘Trading’. Anyone who successfully passes the trader examination is authorised to trade on SIX Swiss Exchange. Structure of the Trader Examination

The trader examination is an electronic examination. A computer program uses a random number generator to select a certain number of questions from a pool; questions are selected individually for each candidate. Candidates may decide at registration whether to take the test in German or English. Candidates register for the examination through the SIX Swiss Exchange website:

1.1.1 Question Types and Evaluation

The examination comprises two different types of questions:

- Multiple-response questions with up to five possible answers
- True / False questions

In multiple-response questions, one or more answers may be right. In order to answer the question fully and correctly, all correct answers must be selected.

All questions are weighted equally. If a question has multiple correct answers, the number of right answers given is restated as a percentage of the number of possible right answers. Wrongly answered questions result in point deduction of that question.

1.1.2 Aids during the Examination

The following documents are available in electronic form during the test:

- Financial Market Infrastructure Act, FMIA
- Financial Market Infrastructure Ordinance, FMIO
- FINMA Financial Market Infrastructure Ordinance, FMIO-FINMA
- SIX Group Ltd Rules of Organisation for the Regulatory Bodies of the Group's exchanges, RBOR
- SIX Swiss Exchange Rules for the Appeals Board, ABR
- 2018/02 FINMA Circular "Duty to report securities transactions"
- Reporting Rules

1.2 Tips on preparing for the Exam

On the website https://www.six-group.com/en/products-services/the-swiss-stock-exchange/education/trading/exchange-trader.html#scrollTo=test-knowledge you will find a self-test with sample exam questions. The correct answers to these can be checked after completing the self-test.

The sample exam has the following objectives:

- Reviewing what the candidate has learned
- Simulating the actual exam situation (timing, type of questions, working with the tool)

Further information on the examination and preparatory training courses is available at:

Member Education website:

https://www.six-group.com/en/products-services/the-swiss-stock-exchange/education.html

2 SIX

SIX operates Switzerland's financial market infrastructure and offers comprehensive services on a global scale within the company's business units: Exchanges, Securities Services, Banking Services and Financial Information.

As an infrastructure provider with international operations, SIX forms the backbone of the Swiss financial centre and sets global standards with first-class infrastructure services for the financial sector.

SIX stands for high efficiency and innovative power across the entire value chain. The company offers quality services at highly competitive rates to national and international financial market participants. It provides an open architecture through which participants can access trading, clearing and settlement and maintains a worldwide network of partners, with whom it collaborates closely.

SIX is jointly owned by around 130 domestic and foreign shareholders, who are also users of the infrastructure.

Figure: The Business Units of SIX

2.1 Aspiration and Success Factors

Strengthening the financial centre	SIX is fully committed to the Swiss financial centre and its domestic and foreign participants. The company strengthens the Swiss financial centre's positioning in a competitive environment by concentrating the financial market infrastructure under one roof.
Innovative power, efficiency and inter-national competitive excellence	SIX strives for high efficiency and innovative power across the entire value chain of the financial market infrastructure. As a provider of quality services and price leader it creates added value for its national and international clients.
Users as owners	The company is owned by its domestic and foreign users. This broad-based ownership structure, with long-term stability secured by a shareholder agreement, underpins the company's commitment to its clients and key players in the Swiss financial sector.
Open architecture	Through its open architecture, the company allows participants to access trading, clearing and settlement. It maintains a worldwide network of partners, with whom it collaborates closely.
The entire value chain	SIX covers the entire value chain of the financial market infrastructure – from securities trading and settlement via financial information through to payment transfers.
Employee potential	SIX operates in 21 countries, 32 locations and offers its approximately 3,800 employees extensive opportunities for career development.

3 SIX Swiss Exchange

3.1 Introduction

The stock exchange is an organised market for goods and products (including securities) where supply is matched with demand. It offers a marketplace where enterprises can find suppliers of capital and where investors can take part in the development of enterprises.

Exchanges can be classified according to the nature of the products traded:

- Securities exchanges (for example financial market products, equities, derivatives, debt instruments, funds)
- Foreign exchange markets (currencies)
- Commodities exchanges (material goods such as raw materials, agricultural products or foodstuffs)
- Futures and options exchanges

SIX Swiss Exchange was established in 1993 as a securities exchange under the name "Schweizer Börse/Bourse Suisse/Borsa Svizzera/Swiss Exchange".

It introduced electronic exchange operations in 1995–96. But its roots go back further: it was created from the Association of Swiss Stock Exchanges as successor organisation to the earlier trading pits in Basel, Geneva and Zurich.

3.2 SIX Swiss Exchange AG

SIX Swiss Exchange is a central link in the value chain of the Swiss financial market. It organises, operates and regulates important elements of the capital market infrastructure.

The services provided by SIX Swiss Exchange cover the following areas: spot market, information products, operation of automated trading platforms and (through SIX Exchange Regulation AG (SIX Exchange Regulation) the admission of securities for trading on the exchange.

Although firmly embedded within the Swiss financial centre, it systematically pursues an international strategy. SIX Swiss Exchange also provides first-class stock exchange services in collaboration with partners across the globe.

SIX fulfils another important function by establishing regulatory parameters for issuing and trading in securities as well as monitoring and ensuring compliance with these parameters. As a privately-owned public limited company, SIX Swiss Exchange represents the interests of the Swiss financial centre and ensures a balance of interests among all market participants. For example, the Surveillance & Enforcement unit of SIX Exchange Regulation, monitors trading to ensure compliance with legal requirements and trading regulations (incl. implementing provisions). Surveillance & Enforcement will report any suspected breaches of the law or other irregularities to the Swiss Financial Market Supervisory Authority (FINMA) and, if necessary, the appropriate law enforcement authorities.

SIX Swiss Exchange is subject to Swiss law. The Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Act, FMIA) sets out the concept of self-regulation. SIX Swiss Exchange itself is supervised by FINMA.

The new regulatory provisions of FMIA result in significant adjustments with regard to financial market infrastructure. As a result of these requirements, SIX reapplied for the corresponding trading licenses.

Sample question:

SIX Swiss Exchange AG is

Answer:

a) an Aktiengesellschaft (public limited company)
b) an association
c) an agency of the Swiss federal government
d) a self-regulatory organisation

Answer: a), d)

Reasons: SIX Swiss Exchange AG is a public limited company; thus it is neither an association nor a federal agency. It is self-regulated and is supervised by the federal agency FINMA.

4 Trading Participants

4.1 Overview of Market Participants

The investment decisions of the total population of investors determine what happens on the securities exchanges. Private investors are considered indirect market participants, as trading is ultimately performed through the financial companies who are direct participants on the Exchange.

SIX Swiss Exchange participants/securities firms are required to obtain a licence from the Swiss Financial Market Supervisory Authority (FINMA) and must comply with the rules, directives and guidelines of SIX Swiss Exchange.

4.1.1 Securities Firms

A securities firm (formerly known as securities dealer) within the meaning of the Federal Act on Financial Institutions (Art. 41 FinIA) is an entity that, on a commercial basis:

- trades in securities in its own name for the account of clients;
- trades in securities for its own account on a short-term basis, operates primarily on the financial market and:
  - could thereby jeopardise the proper functioning of the financial market, or
  - is a member of a trading venue; or
- trades in securities for its own account on a short-term basis and publicly quotes prices for individual securities upon request or on an ongoing basis (market maker).

4.1.2 Market Maker and Liquidity Provider

4.1.2.1 Market Maker

Market makers are banks or securities firms who have a contractual obligation under a market maker agreement to provide binding quotes (bid and/or offer prices) for certain securities (e.g. ETF) during the trading day, to offer a minimum bid and ask volume and not to exceed a maximum bid/ask spread. These requirements vary according to the underlying and apply on a monthly basis during 90% of the official trading hours of SIX Swiss Exchange. Failure to comply with the market maker agreement constitutes a violation of the Trading Rules. Often the issuer of a structured product is also its market maker, but without any contractual obligation to quote bid and/or ask prices.

4.1.2.2 Liquidity Provider

Liquidity providers are participants who place buy and sell orders by means of orders and quotes in accordance with agreed liquidity requirements. They agree to provide liquidity in the market in certain securities.

The Exchange may offer a market maker or a liquidity provider that fulfils its obligations faultlessly better terms than those that apply to other participants.

4.1.3 Traders

Traders are employees of securities firms who engage in transactions in the name and under the responsibility of a participant for its own or a client’s account.

4.1.3.1 Registration of Traders

Directive 1: Admission of Participants para. 3.2.

Registration authorises a person to act as a trader on a participant's behalf. Applications for registration must be submitted in writing, and any changes must be reported to the Exchange without delay. Traders carry out trading activities on SIX Swiss Exchange under the responsibility of the participant.

A trader must fulfil the registration requirements according to Clause 4.3.2 Trading Rules, i.e. he must

- be of good repute;
- possess sufficient specialist knowledge, in particular the product and market knowledge required for trading on the Exchange;
- be familiar with the trading, clearing and settlement modalities of the Exchange;
- acknowledge the rules and regulations of the Exchange; and
- be subject to the participant's direct right of instruction.

Evidence of sufficient specialist knowledge is deemed supplied if the trader has passed the SIX Exchange Trader Examination. A trader's licence will expire if they remain unregistered for two years. When renewing their registration, traders are required to pass the trader examination again.

All registered traders must attend a web-based refresher course in the event of major system adaptations or regulatory amendments, but every two years at the latest. If the refresher course is not attended by the set deadline, the Exchange may suspend the trader.

4.2 Participant Admission Requirements

The Exchange shall admit an applicant as a participant and conclude a participation agreement with it, providing it meets the following admission requirements:

4.2.1 Authorisation as Securities Firm or Remote Participant

The applicant must hold a licence from the Swiss Financial Market Supervisory Authority (FINMA) as a securities firm pursuant to the Federal Act on Financial Institutions (FinIA) or a remote participant authorisation from FINMA, as laid down in the FMIA.

4.2.2 Participation in a Central Counterparty and Settlement Organisation

The applicant must be a participant in a central counterparty that is recognised by the Exchange, or must have access to such via a general clearing member. The Exchange may grant exceptions to applicants wishing to trade exclusively in securities that are not cleared via a central counterparty.

The applicant must be a participant in a settlement organisation recognised by the Exchange, or must have access to such via a custodian

4.2.3 Collateral Deposit

Trading Rules: Section 3.3

The Exchange may require participants to pay a collateral deposit, which is used to secure outstanding financial obligations to the Exchange and, secondarily, to cover outstanding obligations to other participants.

4.2.4 General Information on Exchange System Access

The applicant must satisfy the technical and operational requirements in order to be connected to the exchange system.

The requirement for all types of connectivity to the SWXess trading platform (the "exchange system") of the Exchange is that the provisions of the Exchange's rules and regulations are complied with and the exchange system is not negatively affected or damaged by the participant connecting to it.

The participant or application service provider (ASP) must ensure that its business is entitled to connect to the exchange system and carry out the planned activities in accordance with the applicable laws and regulations. The foregoing also applies when the participant is not connected to the exchange system directly but via the technical services of an ASP instead.

4.3 Participants' Rights and Obligations

Trading Rules: Section 4

Admission entitles the participant to take part in Exchange trading for its own account and that of third parties.

4.3.1 Continued Compliance with Admission Requirements

Trading Rules: Section 4.1

The participant must comply with the admission requirements laid down in the Trading Rules for as long as it remains a participant.

4.3.2 Compliance with Statutory and Regulatory Provisions

Trading Rules: Section 4.2

The participant undertakes to comply with and enforce internally:

a) the code of conduct for securities trading, as laid down in the Federal Act on Financial Institutions (FinIA), FMIA, the relevant FINMA circulars, and the corresponding professional standards;

b) those domestic and foreign exchange-related laws that apply to it, the corresponding implementing provisions, the rulings of the relevant supervisory authority; and

c) the Trading Rules, the Directives and any rulings issued by Exchange bodies and/or Regulatory Bodies.

4.3.3 Use of the Exchange System

Trading Rules: Section 4.7

The Trading Rules provides that participants must refrain from misusing the exchange system. In particular, manipulating the exchange system and its interfaces is prohibited. The improper use or passing on of exchange software or data received from the exchange system is also prohibited.

4.3.4 Record-Keeping Duties

All relevant matters for regulatory purposes (all entries in the securities journal, telephone calls, electronic correspondence, etc.) must be documented.

Further details and additional rules can be found in the Swiss Bankers Association Guidelines (see Manual Part 2 – "Rules and Regulations" module).

4.3.5 Duty to provide Information

Trading Rules: Section 4.6

The participant undertakes to inform the Exchange and/or SIX Exchange Regulation immediately if:

- it has violated the Trading Rules or is unable to comply with it;
- there is a technical problem connecting to the exchange system;
- it is no longer able to meet (equivalent) technical and operational requirements to those of securities firms;
- the relevant supervisory authority has instigated proceedings against it, its traders, its reporting agents or a person (as described in clause 4.3.1 para. 1 lit. d Trading Rules) above, or has issued aruling, if these proceedings or rulings are relevant to the admission requirements or registration; or
- access to the clearing or central counterparty has been or is very likely to be suspended or terminated

Furthermore, while obliged to uphold statutory confidentiality requirements, the participant must provide access to documents and all such information as is required to maintain an orderly market and to enforce the provisions of the Trading Rules. Where statutory confidentiality requirements apply, the Exchange and/or the Regulatory Bodies may require information in anonymous form.

4.4 Organisational Obligations of Securities Firms

4.4.1 Confidential Price-Sensitive Information

FINMA Circular 2008/13

The handling of confidential, price-sensitive information is to be organised and monitored such that improper market conduct may be determined and detriment to clients prevented.

4.4.2 Chinese Walls/Areas of Confidentiality

Measures to restrict internal information flows:

Departments pursuing different objectives must be separated in such a way as to prevent exchange of information in order to prevent conflicts of interest.

Areas of confidentiality must be created through spatial, staffing, functional, organisational and technical IT measures enabling information to be isolated and controlled.

Compliance must be monitored by an authority appointed for this purpose (e.g. a compliance function).

4.5 Supervisory Rules for Market Conduct in Securities Trading (Art. 142ff FMIA)

The participant and its traders are required to observe the applicable market conduct rules, in particular those set forth in FINMA Circular "Market Conduct Rules" (FINMA-RS 08/2013), to uphold the integrity of the market at all times and to refrain from unfair trading practices.

4.5.1 Permitted Securities Transactions

Permitted securities transactions and modes of conduct:

- Market making for the purpose of ensuring liquidity in a security on both buy and sell sides and, where appropriate, reducing the bid/ask spread.
- Issuing parallel buy and sell orders in the same financial instrument or different financial instruments (for example on different trading venues) for the purpose of arbitrage.
- Offering liquidity (liquidity providers, for example algorithmic trading), provided the order book entries and trades do not give out misleading signals for other market participants
- Nostro-nostro in-house crosses where equal and opposite trades are matched in the stock exchange system independently of one another and without any previous agreement.
- Not deleting prices that have already been provided when trading is suspended in connection with buybacks under Article 123 FMIO and price stabilizations under Article 126 FMIO

There is a presumption that there is no breach of Article 142ff FMIA where there is evidence that the securities transactions have an economic basis and are consistent with genuine bid and ask behaviour. For example, use of a Volume-Weighted-Average-Price (VWAP) algorithm to repurchase securities during a buyback.

4.5.2 Market Manipulation

Securities transactions must have an economic basis and be consistent with genuine bid and ask behaviour.

More specifically, the following forms of conduct constitute examples of market manipulation:

- Disseminating false or misleading information on circumstances of material importance to the valuation of a security (e.g. a company’s earnings, orders or product pipeline or a general supply shortage).
- Disseminating false or misleading information, rumors or messages that are capable of influencing securities prices in order to exploit the resulting price movement.
- Entering low-volume purchase orders with successively higher prices in order to simulate increased demand amid rising prices (painting the tape).
- Simultaneously buying and selling the same securities for the account of one and the same beneficial owner in order to give out false or misleading signals regarding the supply of, demand for or market price of securities (wash trades).
- Entering equal but opposite buy and sell orders in the same security by prior mutual agreement in order to distort liquidity or prices (matched orders or daisy chains coordinated among a number of parties).
- Constricting the market by building up large positions (cornering) or depositing securities with third parties (parking) in order to distort securities prices (creating a squeeze).
- Buying or selling securities shortly before the exchange closes in order to influence closing prices (marking the close).
- Buying or selling securities in order to move prices (ramping) or keep them at a specific level (e.g. capping, pegging), unless this is done to stabilize prices following a public placement of securities in accordance with FMIA Article 143and FMIO Art. 126.
- Influencing commodity prices in order to give out false or misleading signals regarding the supply of or demand for securities.
- Creating an overhang of buy or sell orders by entering large orders in the order book that are capable of influencing prices in order to influence the valuation of a security.
- Placing orders in the trading system in order to create an illusion of supply or demand and then deleting them prior to execution (spoofing, layering).

4.5.3 Overview Market Manipulation

Not permitted Conduct	Creating the Illusion of Volume	Manipulating Price	Can be done alone	Done in Groups of Traders
Painting the Tape	✓	✓	✓	
Wash Trades		✓	✓	
Daisy Chains/ Matched Orders	✓	✓		✓
Creating a Squeeze		✓	✓	✓
Marking the Close		✓	✓	
Ramping		✓	✓	
Capping/Pegging		✓	✓	
Spoofing/Layering	✓		✓	

4.6 Swiss Bankers Association Guidelines

All securities firms must observe certain rules of conduct when engaging in securities trading. These rules are set forth in the Federal Acts & Ordinances and described in detail in the Guidelines of the Swiss Bankers Association.

Securities firms have the following duties in relation to their clients:

- a duty of disclosure; they must, in particular, inform clients of the risks associated with certain types of transactions
- a duty of diligence; in particular to ensure the best possible execution (best execution) of client orders and the ability to retrace all the steps taken in the execution of client orders
- a duty of loyalty; securities firms must ensure that in the event of any potential conflict of interests, clients' interests are not adversely affected
- clients must be treated fairly and equally
- securities orders must be executed or scheduled for execution in the chronological order of entry, irrespective of whether such orders are executed for client accounts, the dealer's own account or an employee's account
- Prohibition of front-running and parallel running: Front and parallel running refers to the practice of taking advantage of price movements before or concurrently with client orders to be executed. The trader uses prior or parallel transactions to take advantage of price movements directly triggered by the client's order.
- Prohibition of price fraud: Price fraud is not permitted. The term refers to the practice of charging the client a higher price than was actually achieved.

In discharging these duties, the client's business expertise and professional knowledge must be taken into account.

Additional information: Swiss Bankers Association - Guidelines

Sample question:

What trading practices are prohibited?

Answers:

a) Front running
b) Price fraud
c) Market Making

Answer: a), b)

Reasons: Front running and price fraud are manipulative practices.

5 Technical Connectivity

5.1 Connectivity Technology

Technical connectivity to SIX Swiss Exchange is provided by the SIX Swiss Exchange Common Access Portal (SCAP) or Co-Location Service.

SCAP - individual and effective connectivity options

SCAP provides an interface with optimum scalability and high data transmission capacity. The connection can be individually tailored to the participant's requirements,. For example, participants wishing to increase market activity can easily increase their bandwidth at any time.

SCAP provides access to both trading environments (member test and production) and all exchange services.

Co-Location - For the fastest possible action and data collection

Co-location access to SWXess bypasses the SCAP access network and instead offers a direct Layer 2 connection to the On Book Matcher via a 200 m equidistant fibre optic cable. Participants can install their technical equipment in the Equinix data center in Zurich next to the SWXess trading engine. This enables minimum latency and maximum data throughput

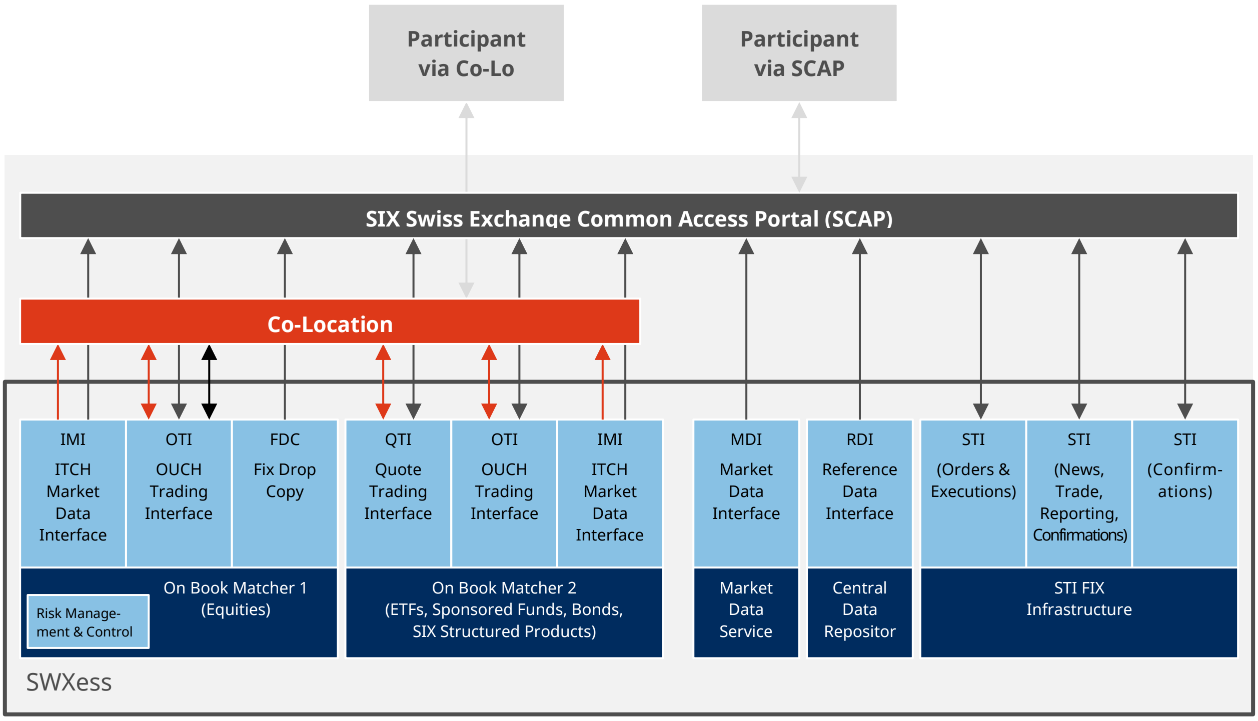


Figure: SWXess

5.2 Types of Connectivity for Trading Participants

Participants can choose from one of the following types of connectivity.

Direct connectivity

Technical connectivity of the participant with the exchange system is accomplished via a direct connection

Connection via an Application Service Provider (ASP)

The participant's technical link-up to the exchange system using ASP connectivity takes place via the connection of an ASP. The participant conducts its transactions via the infrastructure provided by the ASP.

5.3 Interfaces

Several interfaces are available to the participant for connection to trading. The participant selects the most suitable interface and acknowledges that not all interfaces have the same functionality.

Trading Interfaces

- Standard Trading Interface (STI)
- OUCH Trading Interface (OTI)
- Quote Trading Interface (QTI)
- SIX Trading User Interface

Market / Reference Data Interfaces

- ITCH Market Data Interface (IMI)
- SIX MDDX Multi-Dimensional Data fluX® Interface (SIX MDDX)
- Reference Data Interface (RDI)

Reporting Interfaces

- Standard Trading Interface (STI)
- Transaction Reporting Interface (TFI & RTS22)
- Reporting Graphical User Interface

Further Interfaces

- Trade Reconciliation Report (TRR) – With this status participants can reconcile their trades and trade statuses with that of SIX Swiss Exchange.
- Order Reconciliation Report (ORR) – With this interface participants can reconcile their order statuses with that of SIX Swiss Exchange.
- Transaction Reconciliation Report (TXR) - This Report allows Participants to reconcile their Transaction Reports in a more convenient fashion. The file available via this new TXR interface

contains all Transaction Reports which have been created by or submitted on-behalf of a Legal Entity on a given Business Day, irrespective of how the reports have been submitted to SIX

5.3.1 Standard Trading Interfaces (with added Benefits)

Trading interfaces with added benefits enhance the basic On-Book Matcher functions, providing high latency and reduced order throughput. These interfaces are only available via SCAP.

5.3.2 Standard Trading Interface (STI)

The Standard Trading Interface (STI) enables participants to access all trading services and reporting functions. The Standard Trading Interface (STI) provides basic trading and reporting functions. Trade reports, trade corrections and delivery reports can only be processed within the exchange system through this interface. The online Reporting Tool is available as an alternative.

5.3.2.1 STI - Order Types

Order types supported for on-exchange, on-order-book trading:

- Normal Order (limit or market)
- Iceberg Order
- Retail Order (limit or market)
- AVD Order (limit or market)
- Block Order (limit or market)
- Quote Request

In addition orders for SwissAtMid can be entered through STI.

Orders entered via the STI are persisted (not deleted) in the event of an exceptional situation at SIX Swiss Exchange.

5.3.2.2 Other STI Functions

Other functions supported in addition to STI Orders and Executions:

STI Trade Reporting

- One-sided trade report
- Two-sided trade report
- Delivery Report
- Cancellation-Request
- Correction

STI Bilateral Trading

- For off exchange trading on the bilateral platform for structured OTC products
- STI News
- For obtaining trading-related messages

STI Confirmations

- For obtaining confirmation messages

5.4 Direct Trading Interfaces

Direct trading interfaces are used to achieve high performance and ultra-low latency. They allow direct access to the SIX Swiss Exchange On-Book Matcher. Direct trading interfaces are supported by the co-location service, but are also available via SCAP.

5.4.1 OUCH Trading Interface (OTI)

This interface provides the most rapid order input (lowest latency only in conjunction with co-location) and order maintenance. OTI provides direct, high-speed direct access for activities that require high-frequency trading. Furthermore, participants receive status changes and trade confirmations for orders entered via this interface.

5.4.1.1 OTI - Order Types

OUCH Trading Interface (OTI) supports the following types of order for on-exchange, on-order-book trading:

- Normal Order (limit or market)
- Iceberg Order
- AVD Order (limit or market)
- Block Order (limit or market)
- QOD Request and Quote

In the event of an exceptional situation at SIX Swiss Exchange orders previously entered via the OTI interface will be deleted.

5.4.2 Quote Trading Interface (QTI)

Quote Trading Interface (QTI) is the direct interface for market markers. It defines the business message protocol for quote management, allowing market makers to enter, replace and cancel quotes as well as receive status changes and executions (trades) for their quotes.

In the event of an exceptional situation at SIX Swiss Exchange orders previously entered via the QTI interface will be deleted.

5.4.3 SIX Trading User Interface

The SIX Trading User Interface enables participants to access the “Quote on Demand” trading service. In particular, it supports the entry of quote requests and receives execution confirmations for further processing.

5.5 Market Data Interfaces

5.5.1 ITCH Market Data Interface (IMI)

The ITCH Market Data Interface (IMI) enables the participants, ASPs and market data recipients to obtain real-time market information. This market data service was designed specifically for high performance and low latency.

The following information is transmitted:

- Price tick size
- System event messages
- Order book-relevant information (order book depth, best bid/ask price)
- reference data and trading parameters for securities

- Status of trading periods, order book situations and extraordinary situations
- Reference prices

5.5.2 SIX MDDX Multi-Dimensional Data fluX® Interface (SIX MDDX)

The SIX MDDX Multi-Dimensional Data flux® Interface (SIX MDDX) enables the participants, ASP and market data recipients to obtain real-time market information of the SWXess Trading Platform

- SIX Swiss Exchange index data
- Reference data from CONNEXOR and other sources
- Bespoke data sets based on Regulatory Technical Standard (RTS) requirements, using the SoupBinTCP point-to-point network protocol
- Third-party content

5.6 Reference Data Interface (RDI)

The Reference Data Interface (RDI) permits access to reference data, providing trading-specific information on instruments traded, trading participants and trading parameters.

Participants can download these files from the password-protected Member Section of the SIX Swiss Exchange website. They are also available through the SIX Swiss Exchange Central Access Portal (SCAP).

Details of the content of various RDI CSV files are provided below:

File name	Contents
Traded Instrument	The CSV file "Traded Instruments" presents all core data relating to the listed products.
Cash Flow Event	The "Cash Flow Event" file provides core data on cash flow events (dividend, coupon, interest rate and redemption specifications).
Trading Session	The "Trading Session" file provides core data on trading periods and trading times for each security.
Price Step	This file provides specifications on price steps for each security.
Market Data Channel	The "Market Data Channel" file contains participant master data for the compilation of individual order books (pre-trade market data) and reports on completed trades (post-trade data).
Traded Instrument Channel	Provides the connection between the traded instrument and the market data channel.
Calendar Info	Lists calendar days when trading is not available at a given stock exchange.
Party	The "Party" file contains the IDs and roles of market participants.
Derivatives	The "Derivative" upload file presents all master data on listed derivatives such as strike price and the associated currency code, exercise type, contract size, delivery type code, instrument type (put/call) etc.
Reporting Eligible Securities	The Reporting Eligible Security object has an entry for every instrument on the SWXess platform where trade reporting is either mandatory or eligible.
Trading Segment	The Trading Segment object has been introduced to classify the market on the SWXess platform. The market is grouped into several instrument relevant categories as Blue Chip Shares, Mid-/Small-Cap Shares, Exchange Traded Funds, Bonds etc.

Sample question:

What entry options are available to you during continuous trading through the OUCH Trading Interface (OTI)?

Answers:

a) Entry of orders
b) Entry of quotes

Answer: a)

Reasons: Quotes may only be entered through QTI.

5.7 Trader ID

The Exchange assigns each trader a personal, trader ID on registration. The exchange system records all system entries together with this identification number. In the event of a violation of the law or Exchange regulations, the Exchange may suspend or revoke a registration.

The trader ID is personal to the trader and may not be transferred. It may only be given to other registered traders to allow for representation during absences. The participant is required to ensure the traceability of these substitutions by maintaining an internal logbook documenting such arrangements in detail.

5.8 Direct Market Access for Clients

5.8.1 Clients with Direct Market Access (Direct Electronic Access)

As a general rule, only participants have direct electronic access to the SIX Swiss Exchange SWXess trading platform. SIX Swiss Exchange may grant direct electronic access (DEA) to the exchange system. DEA allows authorised clients of participants to transfer orders to the participant's internal electronic trading system, where orders will be routed automatically to the order book of the Exchange. Any client order transferred to the SIX Swiss Exchange trading platform by the intermediary, internal trading system of the participant will be subject to a time lag.

5.8.2 Clients with Sponsored Access

The Sponsored Access (SA) service is intended for latency-sensitive clients of sponsoring participants, where such clients are not themselves participants of SIX Swiss Exchange. The Exchange may grant exceptions to this rule. Sponsoring participants provide direct access via the OUCH Trading Interface to the SIX Swiss Exchange trading system for their clients (sponsored users), without the orders being routed through the sponsoring participant’s internal trading systems.

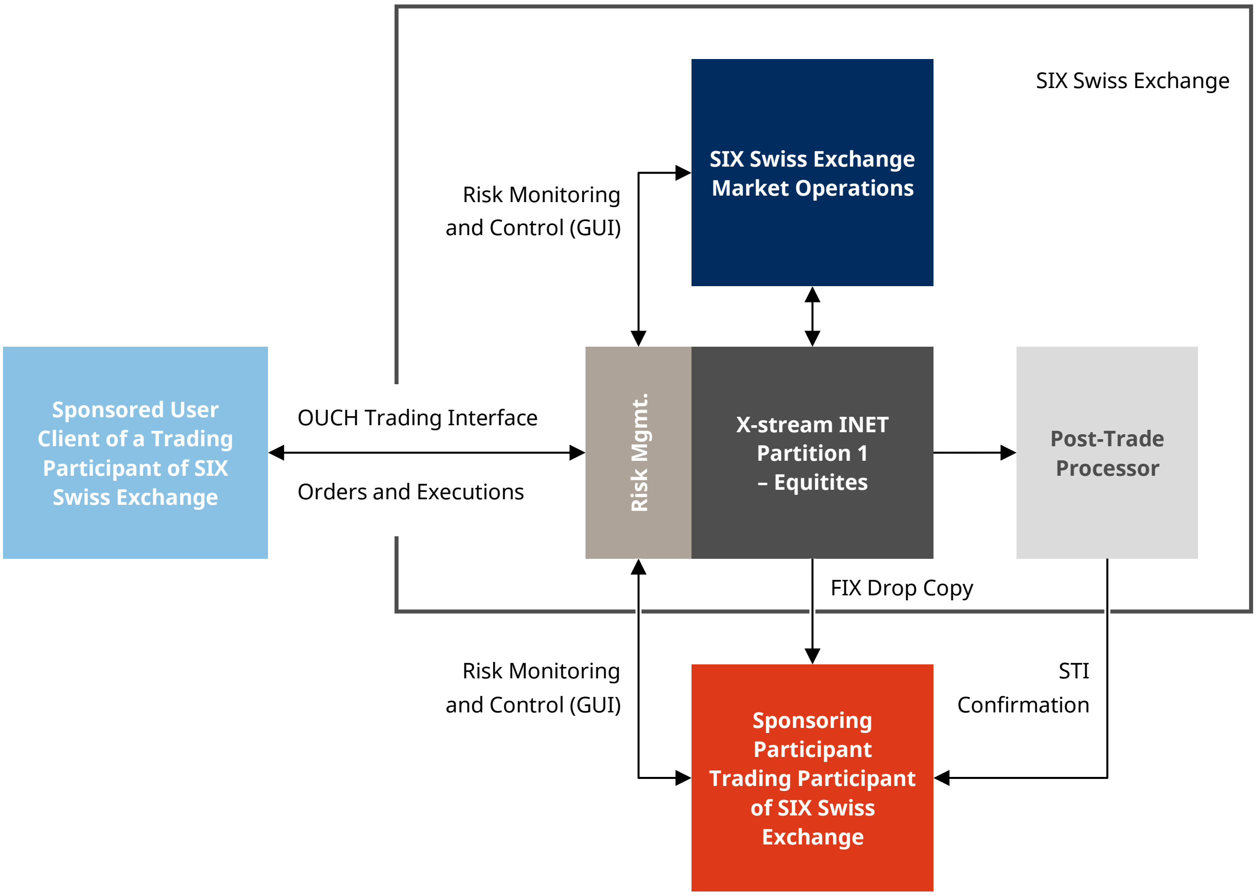


Figure: Functional Setup

Risk management controls

In addition to the general pre-trade checks applied by the Exchange to an incoming order, all orders submitted by a Sponsored User undergo a further check to ensure that only orders issued in accordance with the “Trading” or “Alternative Trading” directives are placed in the trading segments within the scope of Sponsored Access pursuant to the “Trading Parameters” guideline.

The Exchange furthermore provides specific pre- and at-trade risk management controls for Sponsoring Participants with regard to flow from their Sponsored Users. The use of these risk management tools is mandatory. It is the obligation of the Sponsoring Participant to configure and appropriately monitor these controls having due regard to the nature and complexity of each Sponsored User’s flow and to act upon respective notices, warnings and alerts of a breach generated by the Exchange’s system.

In addition to the mandatory specific pre- and at-trade risk management controls, the Exchange offers Sponsoring Participants an ability to prevent a Sponsored User from trading in certain securities or trading segments.

The Exchange furthermore provides the Sponsoring Participant with a "kill switch"-functionality to delete all of its Sponsored User's open orders and to prevent the Sponsored User from transmitting orders to the Exchange's system. The Sponsoring Participant may request the Exchange to activate such "kill switch"-functionality on its behalf, if for any reason, the Sponsoring Participant is not in a position to activate it on its own.

The Sponsoring Participant is obliged to initially assess and regularly review the effectiveness of the risk management controls and to promptly address any issues. It remains the obligation of the Sponsoring Participant to assess whether any additional risk controls are required.

Sponsoring participants are responsible for clearing and settling trades based on orders submitted to SIX Swiss Exchange by sponsored users.

5.8.2.1 Legal Structure

A relationship only exists between SIX Swiss Exchange and the sponsoring participant.

The sponsoring participant maintains a broker-customer relationship with the sponsored user.

From a legal perspective, sponsoring participants are responsible for monitoring and managing orders submitted by sponsored users, subject to the rules, directives and guidelines of SIX Swiss Exchange and the sponsoring participant's risk management policies. The sponsoring participant remains liable to the Exchange for any acts and omissions, which are committed by, for or on behalf of its sponsored users under the sponsoring participant's member ID, to the same extent as if they were the acts and omissions of the sponsoring participant.

SIX Swiss Exchange assigns an individual Party ID to all sponsored users. This ensures that orders submitted by sponsored users can be identified as originating from those users and distinguished from the orders of sponsoring participants.

In order to ensure that trading functions fairly and efficiently, rules governing Sponsored Access have been incorporated into the Trading Rules and Directives, including rules on:

- Liability for the acts and omissions of sponsored users
- Conditions for granting Sponsored Access and termination of Sponsored Access
- Risk management checks
- Special rights of intervention for the Exchange

6 The Business Day

SIX Swiss Exchange specifies and publishes business days in the trading calendar. Business days are subject to change in special situations.

The business day comprises the trading day and the clearing day and consists of the following business periods:

- Pre-Opening
- Opening
- Continuous Trading
- With or without Closing Auction (End of Trading/Closing Auction)
- Trading-At-Last
- Post-Trading

The business day extends from 6.00 am to 10.00 pm (CET), the clearing day from 8.00 am to 6.15 pm. The trading day begins at opening and ends at close of trading. Trading hours are defined for each trading segment. Settlement may be carried out throughout the business day.

A global overview of the business day is provided on the next page:

Business Day Overview

Business Day | Clearing Day | Trading Day

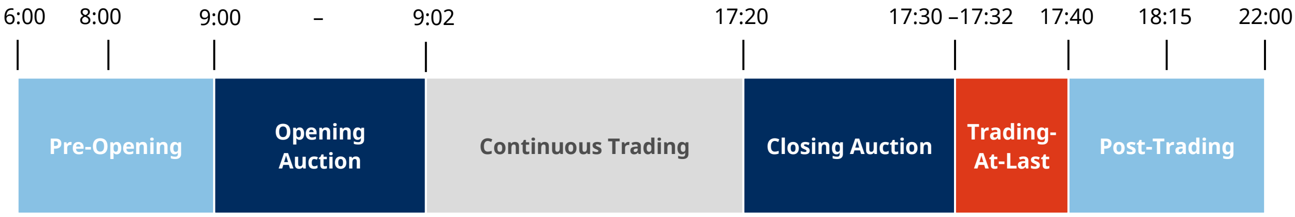
Time (CET)	Description	Segments	Trading Period
06:00	Start of Business Day		Pre-Opening
08:00	Start of Clearing Day		Pre-Opening
08:30	Opening Start of Trading	Bonds - CHF Swiss Confederation (incl. Quote on Demand) Bonds - CHF Swiss Pfandbriefe (incl. Quote on Demand) Bonds - Non CHF	Opening
09:00	Opening	Blue Chip Shares Mid-/Small-Cap Shares Secondary Listing Shares Sponsored Foreign Shares Separate Trading Lines Investment Funds Sparks Shares Exchange Traded Funds (ETF) Exchange Traded Funds (ETF) on Bonds of the Swiss Confederation Exchange Traded Products (ETP)	Opening
09:00	Start of Trading	SwissAtMid Swiss EBBO Quote on Demand ETF/ETP QOD Europe	Opening
09:15	Opening	Sponsored Funds Structured Products Rights and Options	Opening
09:30	Opening Start of Trading	Bonds – CHF (incl. Quote on Demand)	Opening
15:00	Opening	Global Depository Receipts	Opening
			Contin-uous Trading
17:00	End of Trading	Bonds - CHF Swiss Confederation Bonds - CHF Swiss Pfandbriefe Bonds - Non CHF Bonds – CHF Exchange Traded Funds (ETF) on Bonds of the Swiss Confederation	End of Trading
17:15	End of Trading	Structured Products Rights and Options	End of Trading
17:20	End of Trading	SwissAtMid Swiss EBBO	End of Trading
17:20	Start of Closing Auction	Blue Chip Shares Mid-/Small-Cap Shares Sparks Shares Global Depository Receipts Secondary Listing Shares Sponsored Foreign Shares Separate Trading Lines Investment Funds	End of Trading
17:30	Start of Closing Auction	Sponsored Funds Exchange Traded Funds (ETF) Exchange Traded Products (ETP)	End of Trading
17:30	Run Auction and Close	Blue Chip Shares Mid-/Small-Cap Shares Sparks Shares Global Depository Receipts Secondary Listing Shares Sponsored Foreign Shares Separate Trading Lines Investment Funds	End of Trading
17:30	End of Trading	Quote on Demand ETF/ETP QOD Europe	End of Trading
17:35	Run Auction and Close	Sponsored Funds Exchange Traded Funds (ETF) Exchange Traded Products (ETP)	End of Trading
17:30	Start of Trading-At-Last	Blue Chip Shares Mid-/Small-Cap Shares Sparks Shares Global Depository Receipts Investment Funds	Trading-At-Last
17:40	End of Trading-At-Last	Blue Chip Shares Mid-/Small-Cap Shares Sparks Shares Global Depository Receipts Investment Funds	Trading-At-Last
18:15		End of Clearing Day	Post-Trading
22:00		End of Business Day	Post-Trading

Source: https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html#trading-guides

Note : For more information on Sparks and Global Depository Receipts (GDRs), please see the following links: Sparks and GDRs.

7 The Trading Process in Different Exchange Periods

Each business day is divided into five exchange periods. The times of the exchange periods vary according to the trading segment.



7.1 Pre-Opening

Pre-opening shall be the period between the start of the trading day and the actual opening of trading.

Participants and liquidity providers may enter new orders and quotes in the order book or delete existing orders and quotes.

The Exchange shall calculate the theoretical auction price in accordance with the principle of highest executable volume and publish it on an ongoing basis. No trade and therefore no price formation shall take place.

7.2 Opening

The opening price at the start of trading (or when trading resumes after a suspension) is determined in accordance with the highest executable volume principle at the trading times listed in the table above (Business Day Overview). The price thus determined leads to the maximum executable trading volume.

The Exchange shall extend the auction time once for a defined period if the theoretical auction price lies outside of the applicable bandwidth compared to the reference price or not all unlimited orders can be executed (Delayed Auction).

The Exchange shall not open continuous trading if not all unlimited orders can be executed in an auction (Non Opening). In this condition, no theoretical auction price can be calculated either.

The Exchange shall not hold an auction as long as continuous trading in the underlying security is interrupted (Underlying Condition).

If a trade takes place in the auction, this price shall be the opening price and the new reference price

If only market orders are executed, the reference price becomes the opening price.

The individual securities in the various segments open at a random time interval of two minutes. The random time is meant to make it difficult to manipulate prices. Orders entered before opening of a given issue are factored into the opening price.

7.3 Continuous Trading

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Continuous trading extends from opening to close of trading for the given trading segment and commences after opening of the order book (unless a delayed opening or non-opening occurs).

During continuous trading, new orders and quotes are executed on an ongoing basis in accordance with the matching rules against orders and quotes already in the order book. All orders remain in the order book until they are executed/withdrawn or expire.

Incoming orders and quotes are executed in one or more parts at equal or different prices in accordance with the price-time priority principle.

If trading in the underlying issue is stopped, the Exchange will also stop trading in the corresponding instruments (derivatives, separate trading lines, etc.) – "underlying not trading".

7.4 Closing Auction

Immediately after the end of the “Continuous Trading” period, a closing auction phase starts. During this phase, participants and liquidity providers may enter new orders and quotes in the order book or delete existing orders and quotes. The Exchange shall calculate the theoretical auction price in accordance with the principle of highest executable volume and publish it on an ongoing basis. No trade and therefore no price formation shall take place.

The Exchange shall end the closing auction in accordance with the principle of highest executable volume. The end of the closing auction, and thus the closing of the book, occurs at a random time (2-minute random time).

The Exchange shall extend the auction time once for a defined period if the theoretical auction price lies outside of the applicable bandwidth compared to the reference price (Delayed Auction).

The Exchange shall not resume trading if not all unlimited orders can be executed in an auction (Non Opening). In this condition, no theoretical auction price can be calculated either. The Exchange shall not conduct an auction as long as continuous trading in the underlying security is interrupted (Underlying Condition).

If a trade takes place in the auction, this price shall be the closing price and the new reference price. If no trade takes place in the auction, the last trade of the day shall be the closing price. If no trade takes place during the day, there shall be no new closing price and the existing reference price shall remain unchanged.

Close of trading in trading segments that are eligible for Trading-At-Last does not occur until after the end of the Trading-At-Last period. If there is no Trading-At-Last, trading shall only close when the Trading At-Last period would end. If no Trading-At-Last period is provided for the corresponding trading segment, trading closes after the end of the closing auction period.

The Exchange may adjust the reference price in certain cases.

Orders with the validity "at-the-close" can be entered during pre-opening and continuous trading and are only visible in the order book at the start of the closing auction (from 17.20 h onwards).

7.5 Close of Trading without Closing Auction

If no closing auction takes place after the end of the continuous trading period and if there is no Trading-At-Last period, trading shall close at the end of the continuous trading period.

The closing price and reference price shall correspond to the price last established in continuous trading. If there is no trade during the day, there shall be no new closing price and the existing reference price shall remain unchanged.

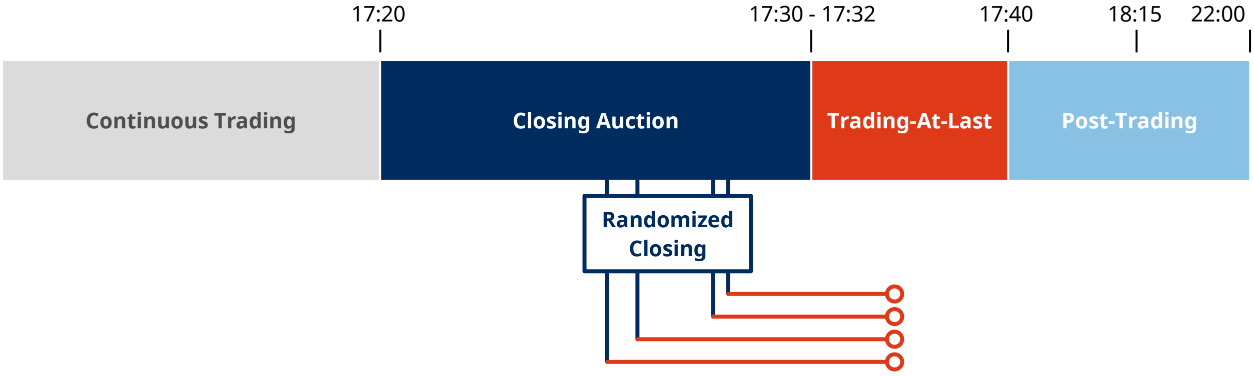
The Exchange may adjust the reference price in certain cases.

7.6 Trading-At-Last (TAL)

Directive 3: Trading

After the Closing Auction (valid for on book trading in the Central Limit Order Book) the Trading-At-Last (TAL) period offers the possibility to match additional volume in Blue Chip Shares ,Mid-/Small-Cap Shares, Sparks Shares, GDRs and Investment Funds at the Closing Price. During the TAL period, orders are continuously matched and trades are published immediately.

There is no pre-trade transparency during this period; consolidated pre-trade updates are published at the end of the TAL period.



Traders can choose whether or not their open orders are transferred from the closing auction to the TAL period. This option is set to "yes" by default on the participant's side when entering an order (that its orders will be transferred to TAL by default). A suspended order shall be reactivated as soon as the Trading-At-Last period is completed and shall retain its original price-time priority. Changes to the order remain reserved.

Note that SIX may cancel, shorten or extend the duration of the Trading-At-Last period during the trading day in extraordinary situations. In such an event SIX would inform the participants duly in advance by means of a News Message.

Event	Trading Interruption	Randomized Timer
Start Closing Auction	**17:20 CET**	**No**
End Closing Auction	17:30 CET	Yes 2 Minutes
Start TAL	**Immediately after End Closing Auction**	**No**
End TAL	17:40 CET	No

Important:

If the Closing Auction end is delayed and there is a Trading-At-Last period scheduled, then the Trading-At-Last (TAL) phase will also start at the delayed time and will consequently be shortened in length.

7.7 Post-Trading

Directive 3: Trading

After the close of trading, the Exchange deletes all non-executed orders whose validity ends on the date of the current trading day (validity: "good for day" or "dated"). Quotes expire at the end of the business day (validity: "valid for the day").

Participants can enter new orders and quotes in the order book or withdraw existing orders. Orders with a validity date of the current business day are not accepted. Likewise, orders via OTI cannot be entered in post-closing trading.

The Exchange shall calculate the theoretical auction price of the following day in accordance with the principle of highest executable volume and publish it on an ongoing basis. No transaction and therefore no pricing takes place.

8 Exchange Trading

8.1 Market Models and Trading Services

Market Model and Trading Services define the trading process. It determines how orders and quotes are carried out and how each exchange trading period is structured. They also determines which matching rules apply. The On-Book Matcher (OBM) supports the following Market Models and Trading Services:

Market Models

- Central Limit Order Book (CLOB)
- Quote-Driven-Market (QDM)
- Price Validation Market for Structured Products (PVM) (based on QDM)

Trading Services

- Quote on Demand (QOD)
- Mid-Point Order Book (MPOB) – SwissAtMid
- Swiss EBBO Book (EBBO)

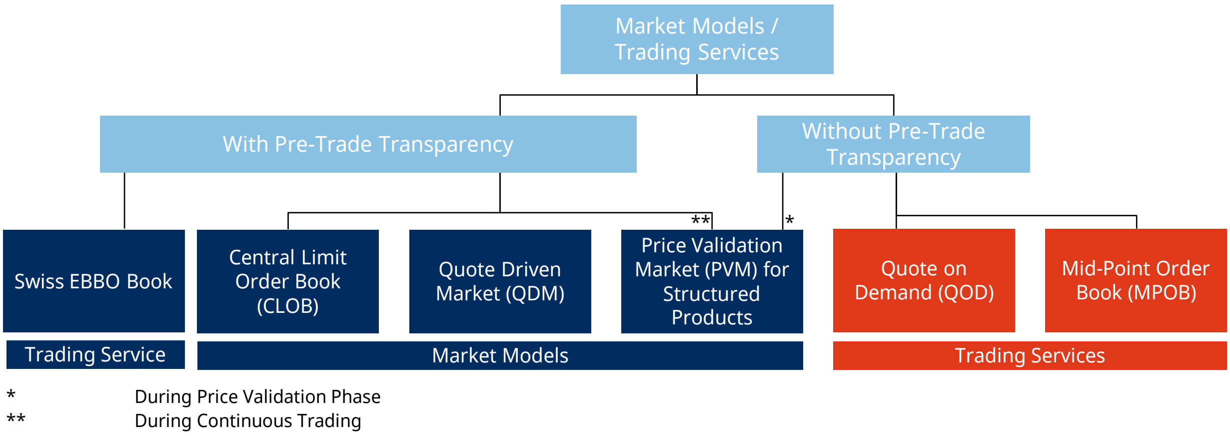


Figure: Market Models and Trading Services

The **Central Limit Order Book (CLOB)** market model treats orders and quotes (only for CHF bonds) in the same way.

In the **Quote-Driven-Market (QDM)**, orders from participants and quotes from admitted market makers and liquidity providers are treated differently in accordance with quote-based pricing.

The **Price Validation Market (PVM) for Structured Products** does not execute orders and quotes immediately but interrupts trading for a pre-defined period in which the Market Maker/Liquidity Provider as well as the clients can validate their price of the order or quote. During the Price Validation Phase there will be no pre-trade transparency in the affected order book.

The **Quote on Demand (QOD)** represents an on-exchange non-displayed trading service for trading Exchange Traded Funds (ETFs),Exchange Traded Products (ETPs) and Bonds - CHF. A Call Phase is triggered for each submitted Quote Request during Continuous Trading. At the start of the Call Phase, all registered Liquidity Providers will be invited to submit Buy and Sell Quotes with the quantity defined by the participant on the Quote Request. (Details see Chapter ”Alternative Trading”**)**

The **Mid-Point Order Book Market (MPOB / SwissAtMid)** combines a non-displayed order book and order types which will allow execution of Swiss equities (Blue Chip Shares and Mid-/Small-Cap Shares) at the Mid-Point Price of the Central Limit Order Book (CLOB).

Swiss EBBO is a service for on-exchange, hybrid trading in Swiss equity securities in which the aim is to achieve trades at the European Best Bid and Offer (EBBO) price on a best effort basis.

The table below shows which trading segments are included in which market model, the possible order book statuses and which pricing principle applies:

Overview of Market Models				
	Central Limit Order Book CLOB	**Quote-Driven-Market QDM**	**Price Validation Market (PVM) for Structured Products**	**Quote on Demand QOD**
Trading Segments	Blue Chip Shares Mid-/Small-Cap Shares Sparks Shares Global Depository Receipts Secondary Listing Shares Separate Trading Lines Investment Funds Rights and Options Bonds (CHF)	Exchange Traded Funds (ETFs) Exchange Traded Products (ETPs) Sponsored Funds Bonds (non-CHF) Sponsored Foreign Shares	Structured Products	Exchange Traded Funds (ETF) Exchange Traded Products (ETP) Bonds (CHF)
Trading Period	Pre-Opening Opening Continuous Trading Close of Trading with* or without Closing Auction (*Blue Chip Shares, Mid-/Small-Cap Shares, Secondary Listing Shares, Separate Trading Lines, Investment Funds) Trading-At-Last (TAL)** Post-Trading **Blue Chip, Mid-/Small-Cap, Sparks Shares & Global Depository Receipts	Pre-Opening Opening Continuous Trading Close of Trading with* or without Closing Auction (*ETF, ETP , Sponsored Funds, Sponsored Foreign Shares) Post-Trading	Continuous Trading	Continuous Trading
Matching Rules	CLOB Matching Rules	Quote Domination Matching Rules	Price Validation Matching Rules (based on QDM)	Quote on Demand Matching Rules
Trading Interface	<u>Stocks</u> STI-Orders OTI-Orders <u>Bonds</u> STI-Orders OTI-Orders QTI-Orders	STI-Orders OTI-Orders QTI-Orders	STI-Orders OTI-Orders QTI-Orders	<u>Quote Request</u> STI Quote on Demand User Interface (UI) <u>Quote</u> QTI

Overview of Market Models		
	Mid-Point Order Book (MPOB) SwissAtMid	**Swiss EBBO Book EBBO**
Trading Segments	Blue Chip Shares Mid-/Small-Cap Shares Sparks Shares Global Depository Receipts Investment Funds	Blue Chip Shares Mid-/Small-Cap Shares
Trading Period	Primary Condition MPOB Continuous Trading MPOB Post-Trading	Continuous Trading
Matching Rules	Mid-Point Order Book (MPOB) Matching Rules	Swiss EBBO Matching Rules
Trading Interface	STI-Orders OTI-Orders	EBBO Normal Order STI / OTI EBBO Liquidity Provider Order OTI

Directive 3: Trading, Section 5

8.2 Order Placement: Orders and Quotes

Each trade begins with an order or a quote.

Orders/Quotes may be entered in or deleted from the order book during set periods. All incoming orders are assigned a time stamp and identification number. Amended orders lose their original time priority and are given a new time stamp, unless only the number of securities is being reduced.

- Orders/Quotes that have been entered through the Standard Trading Interface (STI) will retain the same identification number.
- For orders/quotes, transmitted through OUCH Trading Interface (OTI) or Quote Trading Interface (QTI), which have been successfully modified (price and/or volume), the original order/quote will be deleted and a new order/quote with a new identification number will be created. The price-time priority of the original order will be lost as a result. If any modification of a order/quotes fails, the original order/quote will still be deleted.

8.3 Order

An order is a binding offer to buy or sell a certain quantity of one security at an unlimited or limited price.

In the market models Central Limit Order Book and Quote-Driven-Market the orders contained in the order book are binding. In the market model Price Validation Market the orders contained in the order book are not binding.

8.3.1 Order Entry Attributes

Orders must be entered with all required attributes. Otherwise they will be rejected by the exchange system.

The table below shows which entry attributes are essential for successful entry and which are optional:

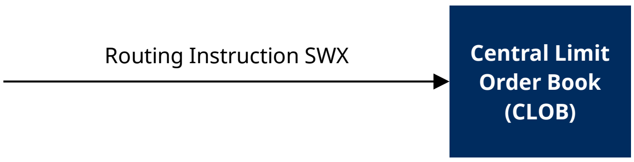
Attribute	Entry through STI	Entry through OTI
Direction/Side	Mandatory Buy or Sell	
Security	Mandatory	
Order Volume	Mandatory CLOB – with pre-trade transparency Number of securities or nominal value for percent-listed instruments. In the case of Iceberg Orders, the visible quantity in the order book must also be defined. MPOB – without pre-trade transparency • Number of securities, without statement of the minimum execution quantity; or • Number of securities, with statement of the minimum execution quantity;	
Price Type	Mandatory Unlimited (at market) or limited	

Price	1. Normal, Retail and Volume Auction Discovery orders: limited or unlimited; 2. Iceberg Orders. Limited only 3. Order with routing instruction SWMB: limited For Retail orders, the Trigger Price (Trigger) must also be defined. The price must conform to the price steps defined for each security.	
Validity	Optional If the validity period is not defined, the order will expire after close of trading.	
Alogorithmic Trading	Mandatory The participant must report the operation of algorithmic trading to the Exchange and must flag orders generated by such algorithmic trading. It must use a separate identification for each algorithm and must also indicate the traders who initiated these orders.	
Trading Capacity	Mandatory Client transactions (R) Trades as principal (P)	Mandatory Client transactions (R) Trades as principal (P) This will either be set as the default value based on the master data, or the attribute can be entered on the order
Participant ID	Mandatory	
Trader ID	Mandatory	
Routing Instructions (STI only)	Mandatory	
Internal Participant References	Optional	

8.3.2 Routing Instructions

Routing instructions can be used to determine in which market model the order is to be traded. Following the example of the STI Routing Instruction SWX:

Routing Instruction SWX – Central Limit Order Book
«SWX» for entry in the Central Limit Order Book (CLOB) or into the order book of the Quote Driven Market (QDM). The "SWX" routing instruction is supported for Normal Orders with or without a price limit:



8.3.3 Order Types

The Exchange supports the order types Normal Order and Iceberg Order.

8.3.3.1 Normal Order

A Normal Order may be entered at any time during the trading day and is visible in the order book. Nonexecuted parts of the order remain in the order book until they have been executed or deleted, or have expired. Other validities and routing instructions remain reserved.

8.3.3.2 Iceberg Order

An Iceberg order may be entered at any time during the trading day and is used to buy and sell securities traded on SIX Swiss Exchange as part of large orders. This order type enhances the liquidity in the order book, while the participant also benefits from the fact that the price of the trade is not negatively impacted by the large volume.

Any Iceberg Order entered has a total quantity and a displayed quantity that is shown on the order book. The order book only shows the displayed quantity (the tip of the iceberg) and only this is visible to the market. Once the displayed quantity is executed, the order book is topped up with another portion in the specified display size until the entire order quantity is filled, expires or is deleted by the participant. Each new tranche of quantity displayed for an Iceberg Order is given a new time stamp and a new identification number. Any remaining quantity for the Iceberg Order may be deleted at any time during the business day. If no value is defined for the displayed portion, the order will be treated as a "Normal Order".

In auctions Iceberg Orders are considered with its total volume.

During both continuous trading and in an auction the hidden quantity of an Iceberg Order may be executable, if on the opposite side of the order book more liquidity is available than the visible quantity of the Iceberg Order. As a consequence after execution of the visible quantity and any other potential orders with a higher price-time priority, the entire hidden quantity of the Iceberg Order becomes executable. This means that even if the hidden quantity of the Iceberg Order becomes executable it will remain hidden from the order book.

For regular Iceberg Orders and Iceberg Plus Orders (explained later in this module), it will be possible to define the randomization of the specified visible quantity (top-up size) for every tranche of the total quantity. This functionality is optional and can be configured on a Participant level.

Participants can request SIX Swiss Exchange to randomize the top-up visible quantity of Iceberg Orders within a system wide defined range of 10%.

Example: Participant enters an Iceberg Order with Visible Quantity 100 and has the functionality for top-up randomization enabled on the respective Party ID. In this case SIX Swiss Exchange would randomly define the visible quantity for every tranche of the total quantity of the Iceberg Order between 90 and 110. The randomisation of the Iceberg top-up is not applicable for the visible size when the Iceberg Order is firstly entered.

The Exchange may reject Iceberg Orders which fall short of the predetermined minimum requirements for an order without pre-trade transparency; in particular if the total value of the Iceberg Order falls below the Minimum Order Value set for Iceberg Orders.

Control	Description
Minimum Iceberg Order Value	Order is automatically rejected by the system if the value of the order is smaller than the minimum Iceberg Order value. Minimum Iceberg Order Value = Order Quantity x Order Price

The Minimum Order Value in Swiss francs for Iceberg Orders shall be determined by the Exchange per trading segment. (please see Trading Guide Link). Iceberg Orders always require a price limit; at market orders are not possible.

Iceberg Orders can be entered in the order book through the STI and OTI interfaces at any stage of trading. All order validities and both the CLOB and QDM market models are supported. The Exchange publishes the trading segments that permit this type of order.

Iceberg Orders supported for	
Interfaces	• Standard Trading Interface (STI) • OUCH Trading Interface (OTI)
Market Models	• Central Limit Order Book (CLOB) • Quote-Driven-Market (QDM)
OBM Partition	• OBM – Partition 1 “Equities” • OBM – Partition 2 “Non-Equities”
Trading Segments	• Blue Chip Shares • Mid-/Small-Cap Shares • Sparks Shares • Global Depository Receipts • Secondary Listing Shares • Investment Funds • Bonds – CHF • Bonds – CHF – MD • Bonds – CHF Swiss Confederation • Bonds – CHF Swiss Pfandbriefe • ETF • ETF on bonds of the Swiss Confederation • ETP • Sponsored Foreign Shares • Sponsored Funds

Iceberg Orders on Trading Segments of OBM (On Book Matcher) partition 2 will be offered via Standard Trading Interface (STI) as well as over the OUCH Trading Interface (OTI). Iceberg Orders are not supported for Quotes submitted over the Quote Trading Interface (QTI) by Market Makers or Liquidity Providers.

Please Note

Please note as that the entire quantity (hidden and visible quantity) of an Iceberg Order is executable during an Auction; as a consequence participants can no longer calculate the theoretical auction price themselves. SIX Swiss Exchange will calculate the theoretical auction price correctly and distribute it over the interfaces.

8.3.3.3 Retail Order (Stop Loss and Stop Limit)

A Retail order (Stop Loss and Stop Limit) may be entered at any time during the trading day. It is managed in the exchange system until triggered (that means until the order is possibly routed to the corresponding order book in accordance with the order specification) and is not visible in the order book. If the conditions for triggering the Retail order during continuous trading or during the Trading-At-Last period are met, the order is routed to the corresponding order book in accordance with the order specification. Retail orders are triggered in the Central Limit Order Book market model on the basis of the reference price. In the Quote Driven Market and Price Validation Market market models, Retail Orders are triggered based on the quote of a market maker or liquidity provider on the opposite side or based on the reference price.

In the Quote Driven Market model, a Retail order is only triggered based on the quote of a market maker (for ETFs) or liquidity provider (for Bonds non CHF) on the opposite side if the quote of the market maker or liquidity provider on the opposite side is the highest available bid price in the order book or the lowest available ask price in the order book and the quote is within a spread predefined by the Exchange (see Trading Guide).

Once the Retail order has been triggered, the exemptions from pre-trade transparency and implementing provisions apply for the order in accordance with the order specification, the respective order book, or the corresponding trading period.

The Exchange triggers Retail Orders in accordance with the principle of price-time priority of the entry into the exchange system. The Retail Order remains in the exchange system or in the corresponding order book until the order is executed, deleted or has expired (an execution of the Retail Order is not guaranteed). Retail Orders can be managed in the exchange system or in the order book throughout their entire period of validity and lose time priority, unless only the number of securities is being reduced.

The Exchange differentiates between the following types of Retail orders:

1. Stop Limit: After triggering, the order is routed with a price limit;

2. Stop Loss: After triggering, the order is routed without a price limit.

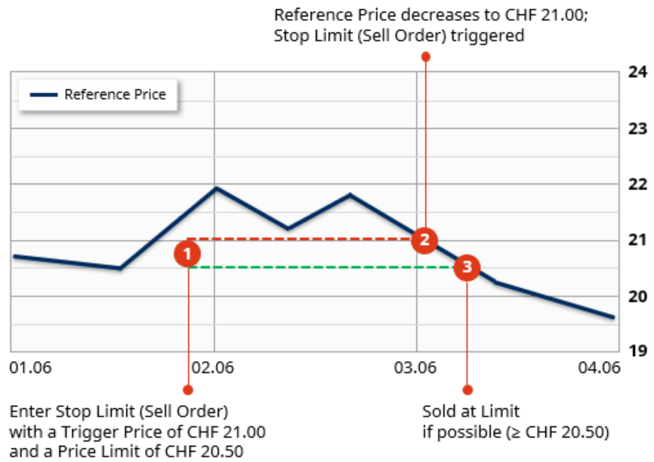
Example: Stop Loss (Market Sell Order)
Central Limit Order Book

Detailed Explanation

Order	Sell Order
Order Type	Stop Loss
Trigger	CHF 21.00
Price Limit	Market
Validities	Good-for-Day, Good-till-Date
Trading Segments	Blue Chip Shares, Mid-/Small-Cap Shares, Secondary Listing Shares, Investment Funds, Rights and Options

The Stop Loss (Sell Order) is executed “at market”: If the reference price (last price paid) reaches the trigger price set by the investor, the security is sold (at market) at the best available price in the order book.

Example: Stop Limit (Limited Sell Order)
Central Limit Order Book



Detailed Explanation

Order	Sell Order
Order Type	Stop Limit
Trigger	CHF 21.00
Price Limit	CHF 20.50
Validities	Good-for-Day, Good-till-Date
Trading Segments	Blue Chip Shares, Mid-/Small-Cap Shares, Secondary Listing Shares, Investment Funds, Rights and Options

The Stop Limit (Sell Order) is executed “at the limit” or better: If the reference price (last price paid) reaches the trigger price set by the investor, the Stop Limit (Sell Order) is only executed if the price does not fall below the limit during the validity of the order.

Figure: Retail orders; see link for further examples.

Stop Loss and Stop Limit Orders supported for	
Interface	• Standard Trading Interface (STI)
Market Model / Trading Service	• Central Limit Order Book (CLOB) • SwissAtMid (MPOB) – Sweep orders only • Swiss EBBO (EBBO) • Quote Driven Market (QDM) • Price Validation Market for Structured Products (PVM)
OBM Partition	• OBM – Partition 1 “Equities” • OBM – Partition 2 “Non-Equities”

Trading Segments	Currently enabled Trading Segments for Iceberg Orders: • Blue Chip Shares • Mid-/Small-Cap Shares • Sparks Shares • Global Depository Receipts • Secondary Listing Shares • Investment Funds • Rights and Options • Separate Trading Lines • ETF • ETF on Bonds of the Swiss Confederation • ETP • Structured Products • Sponsored Foreign Shares • Sponsored Funds

The trigger conditions for Stop Loss and Stop Limit Orders are described in the table below:

Trading Period	Order Book	Stop Loss / Stop Limit Buy	Stop Loss / Stop Limit Sell
Continuous Trading	CLOB	A Buy Stop Loss / Stop Limit Order is triggered when the Reference Price is equal to or greater than the specified Trigger.	A Sell Stop Loss / Stop Limit Order is triggered when the Reference Price is equal to or lower than the specified Trigger.
	QDM	A Buy Stop Loss / Stop Limit Order is triggered when the Best Bid Quote Price or the Reference Price is equal to or greater than the specified Trigger and the quote is within a spread predefined by the Exchange.	A Sell Stop Loss / Stop Limit Order is triggered when the Best Offer Quote Price or the Reference Price is equal to or lower than the specified Trigger and the quote is within a spread predefined by the Exchange.
Auctions (Opening Auction, Stop Trading, Closing Auction)	CLOB / QDM	A Buy Stop Loss / Stop Limit Order is triggered and entered into the Order Book after the Auction when there are trades in the Auction and the resulting Auction price is equal to or higher than the specified Trigger	A Sell Stop Loss / Stop Limit Order is triggered and entered into the Order Book after the Auction when there are trades in the Auction and the resulting when the Auction price is equal to or lower than the specified Trigger.
Trading-At-Last	CLOB	A Buy Stop Loss / Stop Limit Order is triggered by the closing price of the Closing Auction when it is equal to or higher than the specified Trigger.	A Sell Stop Loss / Stop Limit Order is triggered by the closing price of the Closing Auction when it is equal to or lower than the specified Trigger.

Please note that if the conditions to trigger a Stop Loss Order are met on entry, the Stop Loss / Stop Limit Order will not trigger immediately but will only be triggered by subsequent events.

The trigger process for Stop Loss and Stop Limit Orders is described in the table below:

Stop Loss	Stop Limit
When a Stop Loss Order is triggered, it is automatically replaced by a Market Order which is entered into the Order Book with a new OrderID. If a Stop Loss Order is triggered by an Auction Uncross Price then the subsequent Market Order will be entered into the Order Book following the end of the Auction.	When a Stop Limit Order is triggered, it is automatically replaced by a Limit Order which is entered into the Order Book with a new OrderID. If a Stop Limit Order is triggered by an Auction Uncross Price then the subsequent Limit Order will be entered into the Order Book following the end of the Auction.

Important

The triggering of a Stop Loss or Stop Limit Order is no guarantee that the order will be filled. For Market Orders, executions will be carried out at the best transaction price available following entry into the order book. For Limit Orders, executions will be carried out at the best transaction price available within the boundaries of the minimum price limit specified.

8.3.4 Auction Volume Discovery Order (AVD)

An Auction Volume Discovery Order may be entered at any time during the trading day and is not visible in the order book. AVD Orders can be entered with "at-the-opening" validity for the opening auction and with "at-the-close" validity for the closing auction; however, they are not considered for the price determination mechanism of the auction in accordance with the principle of highest executable volume. AVD can be managed in the exchange system or in the order book throughout their entire period of validity and lose time priority, unless only the number of securities is being reduced. AVD Orders are executed against remaining "in limit" orders and quotes from the closing auction as well as "in limit" AVD Orders on the opposite side, taking into account the principle of quantity-time priority at the closing price of the closing auction. "In-limit" orders are defined as those for which the limited price corresponds at least to the price of the auction or better (the price limit for buy orders is equal to or higher than the price of the auction, the price limit for sell orders is equal to or lower than the price of the auction). Unlimited orders are always deemed to be "in limit". If no price can be determined during the auction, AVD will not be executed.

Portions of the AVD order that are not executed will expire after the auction or after the "Trading-At-Last" period.

Central Limit Order Book				
AVD Orders	Theoretical Auction Price = 45.00			AVD Orders
Bid Size	Bid Size	Price	Ask Size	Ask Size
	100	Market		
1000	600	47.00	400	
		46.00		
		45.00	200	
		44.00	100	
	500	43.00	500	
	400	42.00		
		Market	200	400

Without affecting the formation of the theoretical opening or closing price, this order type allows the execution of hidden volume at the uncrossing of the opening and closing auctions.

Scan for animation.

Figure: Auction Volume Discovery Orders

Auction Volume Discovery Orders supported for	
Interface	• Standard Trading Interface (STI) • OUCH Trading Interface (OTI)
Market Model	• Central Limit Order Book (CLOB)
OBM Partition	• OBM – Partition 1 “Equities”
Trading Segments	Currently enabled Trading Segments for Iceberg Orders: • Blue Chip Shares • Mid-/Small-Cap Shares • Sparks Shares • Global Depository Receipts • Secondary Listing Shares • Investment Funds

8.3.4.1 Block Order

This order type enables the entry and execution of indicative and binding block orders in SwissAtMid at or above a predefined Minimum Block Order Value Threshold (Large In Scale), which is set per security. It is discussed in detail in the chapter "Alternative Trading".

8.3.5 Price Limit

8.3.5.1 Order without Price Limit (Unlimited Order)

An unlimited order (market order) is executed at the current best price in the order book. If it is not possible to trade all securities at this price, the remaining volume will be executed at the next-best price. This will continue until the order has been executed. For illiquid securities, there may be no buy or sell orders for a certain period of time, in which case market orders will remain in the order book until they can be executed.

8.3.5.2 Order with Price Limit (Limit Order)

With a limit order, the participant specifies a target price or "limit" along with the volume. This limit represents the price at which the participant is prepared to purchase or sell the designated quantity.

Overview per Order Type

Normal Order	Limited. unlimited
Iceberg Order	Limited
Retail Order	Limited (Stop Limit), unlimited (Stop Loss)
Auction Volume Discovery Order	Limited, unlimited
Block Order	Limited

8.3.6 Order Validities

An order can be placed with the following validities:

- Immediate-or-cancel (IOC or Accept): shall be executed immediately, in full or inasmuch as is possible. Non-executed parts of the order shall be deleted without entry in the order book;
- **Fill-or-kill (FOK):** shall be executed immediately and in full or not at all. If an immediate, full execution is not possible, the order shall be deleted without entry in the order book;
- **At-the-opening:** may be entered only during pre-opening and remains valid up to and including opening. Non-executed parts of the order shall be deleted after opening;
- **At-the-close:** may be entered during pre-opening, continuous trading and Trading-At-Last (TAL) and remains valid up to and including the closing auction (from 17.20 h onwards) or the Trading-At-Last period. Non-executed parts of the order will be deleted after the closing auction or the Trading-At-Last period; other instructions from the participant remain reserved. orders with at-the-close validity are not visible in the order book until the start of the closing auction (17.20 h);
- **Good-for-day:** valid until the close of trading on the current trading day; other instructions from the participant remain reserved.
- **Good-till-date:** valid until the close of trading on a certain trading day; other instructions from the participant remain reserved. The maximum term of validity shall be one year;
  - The maximum period of validity is one year for orders entered through the STI interface.
  - Orders entered through the OTI interface expire at the end of the trading day.

Overview order validities:

Order Book Attributes (Routing Instructions)				
On Book Matcher – Partition		OBM Partition 1 – Order Driven Market		
Market Model and Matching Rules		Central Limit Order book (CLOB)		
Pre-Trade Transparency		Yes		
Trading Segments		Blue Chip Shares Mid-/Small-Cap Shares Secondary Listing Shares Investments Funds		Rights and Options Separate Trading Lines
Order Type		Normal	Iceberg	Normal
Price Limit		Market or Limit	Limit	Market or Limit
Standard Trading Interface (STI)	Good-for-Day (pre-opening, continuous trading, closing auction)	×	×	×
	Immediate or Cancel (continuous trading)	×		×
	Fill or Kill (continuous trading)	×		×
	At the Opening (pre-opening)	×	×	×
	At the Close (pre-opening, continuous trading, closing auction)	×	×	× (NOT Rights & Options)

	Good-till-Date ((pre-opening, continuous trading, closing auction), post trading)	×	×	×
OUCH Trading Interface (OTI)	Good-for-Day (pre-opening, continuous trading, closing auction)	×	×	×
	Immediate or Cancel (continuous trading)	×		×
	Fill or Kill (continuous trading)	×		×
	At the Opening (pre-opening)	×	×	×
	At the Close (pre-opening, continuous trading, closing auction)	×	×	× (NOT Rights & Options)
	Good-till-Date ((pre-opening, continuous trading, closing auction), post trading)			
QTI	Good-for-Business-Day (pre-opening, continuous trading, closing auction, post trading			

Overview of additional segments and interfaces Link.

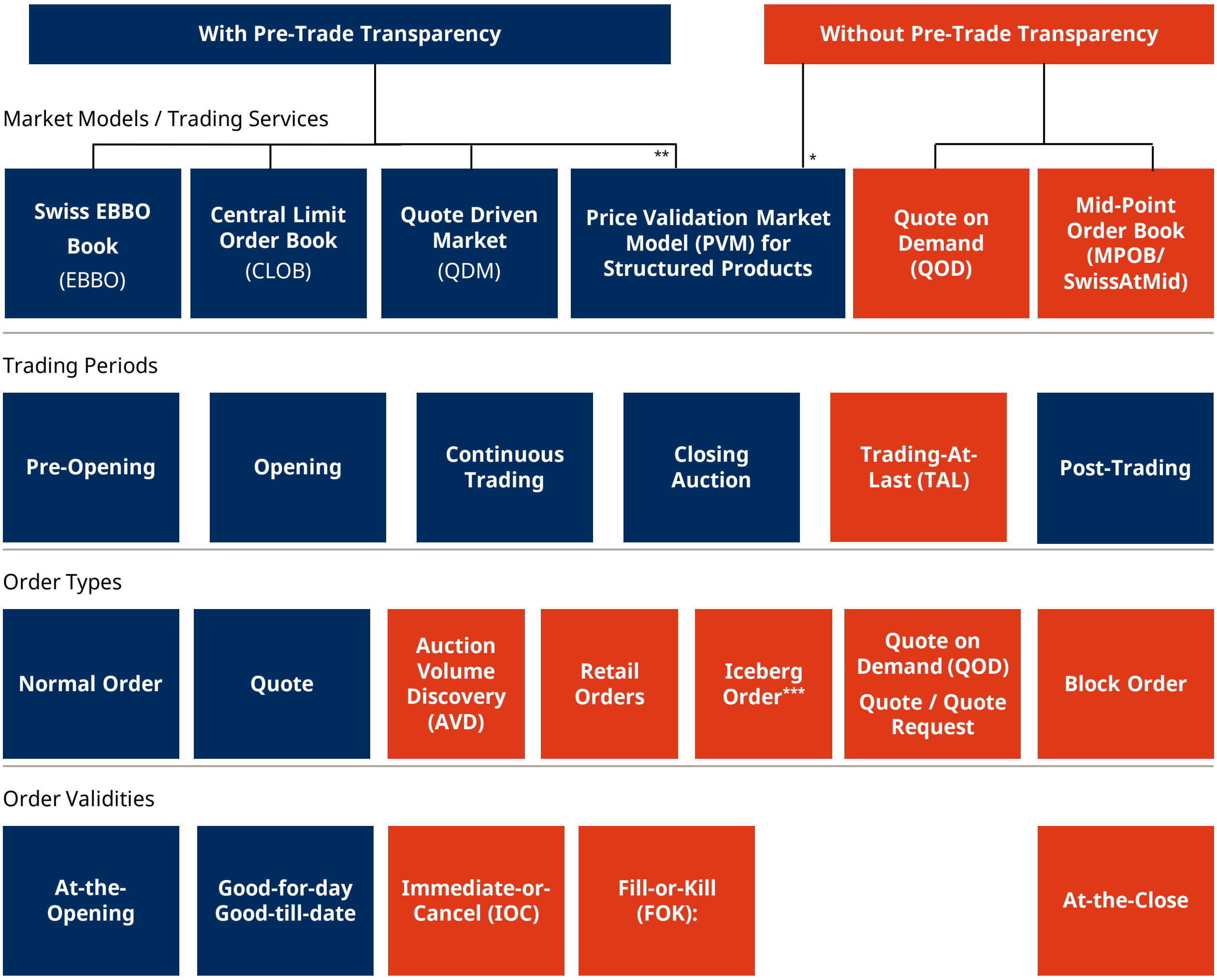
8.3.7 Exceptions to Pre-Trade Transparency

Definition Pre-Trade Transparency:

Pre-trade transparency refers to the level of visibility or disclosure of trading information before a trade is executed on a financial market. The concept aims at providing market participants with information about pending orders, prices and market depth before they commit to executing a trade.

In essence, pre-trade transparency allows traders and investors to assess market conditions, including available liquidity and pricing trends, before they enter into a transaction.

The following table provides an overview of which market models / trading services, trading hours, order types and order validities are not subject to pre-trade transparency (red boxes).



* During Price Validation Phase

** During Continuous Trading

*** The Exchange may reject an Iceberg Order which falls short of the predetermined minimum requirements for an order without pre-trade transparency

Auction Volume Discovery Order and Orders entered during the “Trading-At-Last» Period which are executed by reference price systems of the Exchange are exempted from pre-trade transparency regulations in accordance with Art. 27 para. 4 let. a FMIO.

Iceberg Orders, Retail Orders and orders with “At-the-Close” validity (including Auction Volume Discovery Orders) which are executed using an order management facility of the Exchange are exempted from pre-trade transparency regulations according to Art. 27 para. 4 let. c FMIO.

The Exchange may reject an Iceberg Order which falls short of the predetermined minimum requirements for an order without pre-trade transparency; in particular if the total value of the Iceberg Order falls below the Minimum Order Value set for Iceberg Orders.
Orders in SwissAtMid that are executed with the reference price systems of the exchange are excluded from pre-trade transparency pursuant to Art. 27 para. 4 let. a FMIO.

Orders with the validity "At-the-Close" can be entered during pre-opening and continuous trading and are only visible in the order book at the start of the closing auction (from 17.20h onwards).

All Quote Requests and Quotes which are executed using an order management facility of the Exchange are exempted from pre-trade transparency regulations in accordance with Art. 27 para. 4 let. c FMIO.

8.3.8 Special Features of Orders via OTI

Entering, modifying and deleting orders during post-trading are **not** supported.

While quotes do not expire until the end of the business day, OTI orders are deleted by the On-Book Matcher immediately after close of trading.

Moreover, the user may specify whether or not to delete the order if the user logs off or the connection is broken due to technical difficulties.

8.3.9 Order Flagging

8.3.9.1 Client Transaction or Own Transaction

Under the "Trading capacity" attribute, orders are categorised on entry as:

- Client transaction (R – Riskless Principal)
- Own transaction (P - Principal)

Riskless principal orders are orders placed by a trader on behalf of a client. Principal orders are used for trading on a market participant’s own account. When entering an order through the STI interface, traders have to set this attribute on their own initiative. For orders entered through the OTI interface, this aspect is already defined by default as part of the trader’s registration. However, traders are also able to overwrite the designation on the order.

Orders and quotes with incomplete or incorrect mandatory entries (attributes) will be rejected by the On-Book Matcher (OBM).

8.3.9.2 Algorithmic Trading

The participant must report the operation of algorithmic trading to the Exchange and must flag orders generated by such algorithmic trading. It must use a separate identification for each algorithm and must also indicate the traders who initiated these orders.

The participant must record the orders entered by algorithmic trading, and must store the orders including order cancellations

The participant must possess effective arrangements and risk controls for algorithmic trading, to ensure that its systems:

a. are robust and equipped with sufficient capacity to deal with peak volumes of orders and announcements;
b. are subject to appropriate trading thresholds and upper trading limits;
c. do not cause or contribute to any disruptions on the Exchange;
d. are effective for preventing violations of Articles 142 and 143 FMIA (Insider Trading and Market Manipulation); and
e. are subject to appropriate tests of algorithms and control mechanisms, including the precautions to:
   1. limit the proportion of unexecuted trading orders relative to the number of transactions
   2. that can be entered into the system by a participant;
   3. slow down the flow of orders if there is a risk of the capacity of the system being reached;
   4. and
   5. limit and enforce the minimum tick size that may be executed on the Exchange.

In algorithmic trading, the Exchange may make provision for higher fees for:

a. the placement of orders that are later cancelled;
b. participants placing a high proportion of cancelled orders;
c. participants with:
   1. an infrastructure intended to minimise delays in order transfer;
   2. a system that can decide on order initiation, generation, routing or execution; and
   3. a high intraday number of price offers, orders or cancellations.

Details are laid down in the "List of Charges under the Trading Rules".

Sample question:

A trader enters a Normal Order via OTI during continuous trading. When does the order expire if it was not executed?

Answers:

a) At the end of the trading day
b) At the end of the business day
c) One year after entry if not withdrawn sooner

Answer: a)

Reasons: Since this is a Normal Order and not an IOC or FOK order, it does not expire immediately, but at the end of the trading day.

8.4 Quotes

A quote specifies the simultaneous entry of one or more limited buy and/or sell orders in a single instruction. Quotes remain in the order book until they are executed, overwritten or deleted.

In the market model Quote-Driven-Market the quotes contained in the order book are binding. In the market model Price Validation Market the quotes contained in the order book are not binding.

Quotes can only be entered by market makers or liquidity providers. Quotes can be entered as either bilateral (buy and sell) or unilateral (buy or sell only).

Quotes can only be submitted via the QTI interface.

Step quoting is possible in the ETF, ETP, Sponsored Funds and Sponsored Foreign Shares segments. A dedicated market maker in these segments can enter up to five quotes (bilateral or unilateral) into the order book. For derivatives and bonds, only one quote per market maker/liquidity provider is permitted. If more than one market maker/liquidity provider conducts market making for a security, then all the market makers/liquidity providers may enter quotes concurrently. When a user logs off from the system (disconnect), his quotes will be deleted. Quotes can only be entered "valid for the day", which means that all quotes are automatically removed from the order book at the end of the business day. Users are authorised to enter and withdraw quotes. Additionally, a "Mass Withdraw" function is also available in the QTI.

8.4.1 Entry Attributes for Quotes

The table below shows the available attributes when entering quotes. It also shows which attributes are essential for entry. If the required attributes are not specified when the quote is entered, the quote will be rejected by the On-Book Matcher.

Attribute	Entry through QTI
Direction/Side	Mandatory Buy and/or sell
Security	Mandatory
Order Volume	Mandatory
Price Type	Mandatory Price limit must be provided
Price	Mandatory The price must conform to the price steps in effect for the security
Algorithmic Trading	Mandatory The participant must report the operation of algorithmic trading to the Exchange and must flag orders generated by such algorithmic trading. It must use a separate identification for each algorithm and must also indicate the traders who initiated these orders.
Trading Capacity	Mandatory* Trades as principal
Participant ID	Mandatory
Trader ID	Mandatory*
Internal Participant References	Optional

* This will either be set as a default value based on the master data, or can be entered on the quote

8.5 Expiry Options and Entry Times for Orders and Quotes

The table below shows the various expiry options and entry times for the different orders and quotes:

Trading Period Overview

Valid as of 22 June 2020

			Pre-Opening	Opening	Continuous Trading	End of Trading			Post Trading
						Without Closing Auction	With Closing Auction	Trading-At-Last	
Duration			06:00 CET until Opening	not applicable	Opening until End of Trading	not applicable	10 minutes	10 minutes	End of Trading until 22:00 CET
Random Time			not applicable	2 minutes	not applicable	None	2 minutes at Run Auction and Close	None	not applicable
Order Entry	STI Orders	Good-for-Day	Yes	No	Yes	No	Yes	Yes	No
		Immediate or Cancel	No	No	Yes	No	No	Yes	No
		Fill or Kill	No	No	Yes	No	No	Yes	No
		At the Opening	Yes	No	No	No	No	No	No
		At the Close	Yes	No	Yes	No	Yes	Yes	No
		Good-till-Date	Yes	No	Yes	No	Yes	Yes	Yes
	OTI Orders	Day	Yes	No	Yes	No	Yes	Yes	No
		Immediate or Cancel	No	No	Yes	No	No	Yes	No
		Fill or Kill	No	No	Yes	No	No	Yes	No
		At the Opening	Yes	No	No	No	No	No	No
		At the Close	Yes	No	Yes	No	Yes	Yes	No
	QTI Quotes		Yes	No	Yes	No	Yes	No	Yes
Order Deletion & Expiry	STI Orders	Good-for-Day	Yes	No	Yes	No	Yes	Yes	No
		Immediate or Cancel	No	No	Deletion if no execution	No	No	Deletion if no execution	No
		Fill or Kill	No	No	Deletion if no execution	No	No	Deletion if no execution	No
		At the Opening	Yes	Expiry if not executed in Opening	No	No	No	No	No
		At the Close	Yes	No	Yes	No	Yes	Yes	No
		Good-till-Date	Yes	No	Yes	No	Yes	Yes	Yes
	OTI Orders	Good-for-Day	Yes	No	Yes	No	Yes	Yes	No
		Immediate or Cancel	No	No	Deletion if no execution	No	No	Deletion if no execution	No
		Fill or Kill	No	No	Deletion if no execution	No	No	Deletion if no execution	No
		At the Opening	Yes	Expiry if not executed in Opening	No	No	No	No	No
		At the Close	Yes	No	Yes	No	Yes	Yes	No
	QTI Quotes		Yes	No	Yes	No	Yes	Not applicable	Yes Quotes are deleted at End of Business Day

Source : https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/regulation.html#trading-guides

8.6 Self-Match Prevention

"Self-Match Prevention" (SMP) is a service for on-Exchange, on-order-book trading. The function prevents on-order-book execution of orders and quotes of the same participant (based on Party ID) that are labelled as own (Principal) transactions. "Self-Match Prevention" will be implemented in accordance with the "cancel oldest" principle. This means that in an executable situation no trade takes place between principal orders/quotes of the same participant; instead, the older of the two executable orders/quotes is deleted from the order book.

The SMP service is also offered for trading without pre-trade transparency in SwissAtMid (MPOB). In contrast to the CLOB SMP functionality, where the older of the two executable orders/quotes is deleted from the book, in SwissAtMid the older of the two orders is <u>not deleted</u>, but the orders in the MPOB are not executed against each other and remain in the order book until the next matching cycle.

Self-Match Prevention is only supported in continuous trading. In auctions (opening or closing auction) or during trading interruptions (stop trading, delay opening, suspension), orders of the same Party ID are executed against each other despite SMP.

The SMP functionality for the Central Limit Order Book (CLOB) is also applicable to orders in Trading-At-Last (TAL).

This section gives an overview of the SMP functionality:

Self-Match Prevention supported for ...	
Trading Interface(s)	Currently enabled interfaces for SMP: • Standard Trading Interface (STI) • OUCH Trading Interface (OTI) • Quote Trading Interface (QTI)
Market Model	Currently enabled market model for SMP: • Central Limit Order Book (CLOB) • Quote-Driven-Market (QDM) • Mid-Point Order Book (MPOB) • Trading-At-Last (TAL)
OBM Partition	Currently enabled Partition for SMP: • OBM – Partition 1 “Equities” • OBM – Partition 2 “Non-Equities”
Trading Segments	Currently enabled trading segments for SMP: • Blue Chip Shares (26) • Mid-/Small-Cap Shares (591) • Sparks Shares • Global Depository Receipts • ETF (584) • ETF on bonds of the Swiss Confederation (585) • ETP (588) • Sponsored Funds (612)

Order Types	Currently enabled orders for SMP: • Normal Orders • Iceberg Orders • Quotes • Limit Plus Orders • Iceberg Plus Orders

"Self-Match Prevention" is an **optional** service and free of cost that can be configured on request and used by all participants.

8.7 Capacity Allocation

The capacity allocation process defines the number of quotes and orders for individual participants. QPS (quotes per second) is used to measure quotes, OTPS (OUCH Transactions per second) to measure OTI orders and FOPS (FIX orders per second) to measure STI orders. This allows SIX Swiss Exchange to maintain constant system performance and protect participants against heavy transaction loads from other participants.

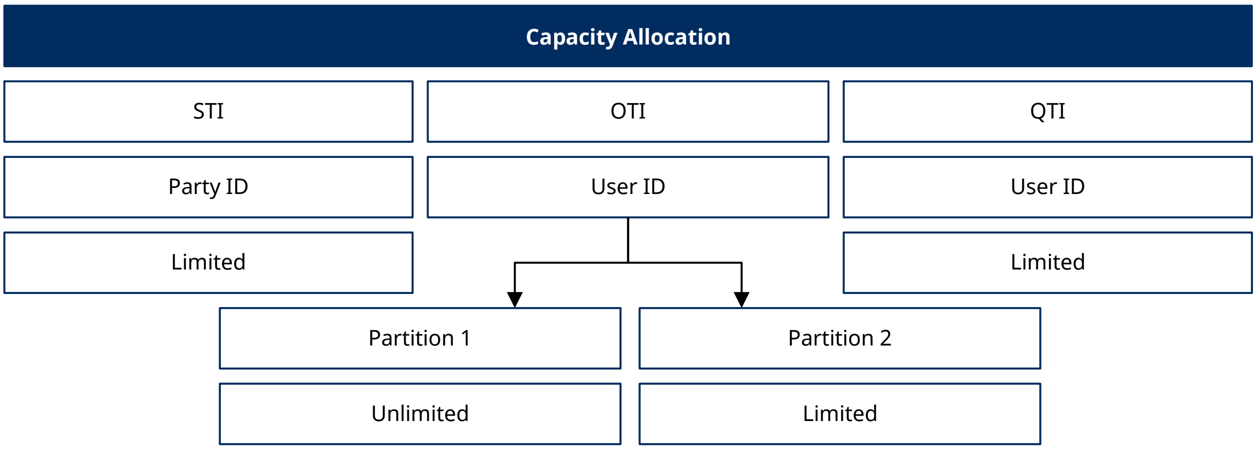


Figure: Capacity Allocation

9 Tick Sizes

Prices cannot set arbitrarily and follow a prescribed sequence of price steps. Each securities issue is assigned to a specific category for this purpose. When this reaches a new price category, the relevant price step takes effect.

If a limit order is entered that does not correspond to the applicable tick size regime, it is rejected by the On-Book Matcher.

Tick sizes only apply to on-order-book and in the non-displayed order book.

Blue Chip Shares; Mid-/Small-Cap Shares; Secondary Listing Shares*, Sponsored Foreign Shares with primary market of the security in the EU

MiFIDII Tick Size Table

Price Step Group Code	LA	LB	LC	LD	LE	LF
Price ranges	0 ≤ Average daily number of transactions < 10	10 ≤ Average daily number of transactions < 80	80 ≤ Average daily number of transactions < 600	600 ≤ Average daily number of transactions < 2000	2000 ≤ Average daily number of transactions < 9000	9000 ≤ Average daily number of transactions
0 ≤ price < 0.1	0.0005	0.0002	0.0001	0.0001	0.0001	0.0001
0.1 ≤ price < 0.2	0.0010	0.0005	0.0002	0.0001	0.0001	0.0001
0.2 ≤ price < 0.5	0.0020	0.0010	0.0005	0.0002	0.0001	0.0001
0.5 ≤ price < 1	0.0050	0.0020	0.0010	0.0005	0.0002	0.0001
1 ≤ price < 2	0.0100	0.0050	0.0020	0.0010	0.0005	0.0002
2 ≤ price < 5	0.0200	0.0100	0.0050	0.0020	0.0010	0.0005
5 ≤ price < 10	0.0500	0.0200	0.0100	0.0050	0.0020	0.0010
10 ≤ price < 20	0.1000	0.0500	0.0200	0.0100	0.0050	0.0020
20 ≤ price < 50	0.2000	0.1000	0.0500	0.0200	0.0100	0.0050
50 ≤ price < 100	0.5000	0.2000	0.1000	0.0500	0.0200	0.0100
100 ≤ price < 200	1.0000	0.5000	0.2000	0.1000	0.0500	0.0200
200 ≤ price < 500	2.0000	1.0000	0.5000	0.2000	0.1000	0.0500
500 ≤ price < 1000	5.0000	2.0000	1.0000	0.5000	0.2000	0.1000
1000 ≤ price < 2000	10.0000	5.0000	2.0000	1.0000	0.5000	0.2000
2000 ≤ price < 5000	20.0000	10.0000	5.0000	2.0000	1.0000	0.5000
5000 ≤ price < 10000	50.0000	20.0000	10.0000	5.0000	2.0000	1.0000
10000 ≤ price < 20000	100.0000	50.0000	20.0000	10.0000	5.0000	2.0000
20000 ≤ price < 50000	200.0000	100.0000	50.0000	20.0000	10.0000	5.0000
50000 ≤ price	500.0000	200.0000	100.0000	50.0000	20.0000	10.0000

* Secondary Listing Shares: If the primary market of the security is **outside** the EU the Liquidity Band LA "0 ≤ Average daily number of transactions < 10" will be allocated.

Source:https://www.six-group.com/dam/download/the-swiss-stock-exchange/trading/trading-provisions/regulation/trading-guides/price-step-equity.pdf

10 Order Book

The exchange system maintains an order book for each security traded and each trading currency, which is divided into a bid and ask side. Each valid order and/or quote is entered into the order book sorted by price and, if there are multiple orders/quotes at the same price, by order received. The oldest orders/quotes with the best prices, i.e. the lowest ask or highest bid price, always take priority; "at the market" is always considered the best offer. The best bid and ask prices are collectively known as the inside market.

Order books may take different forms:

The SIX Swiss Exchange On-Book Matcher (OBM) sorts and presents the supply and demand situation based on the limits in the order book. All registered traders have access to the order book.

An excerpt from the cumulative order book during continuous trading is shown below:

Letzter Preis / Volumen	CHF 11.48 / 3'000	Datum / Zeit	06.12.2011 / 17:11:46
Differenz Vortag / Absolut	0.70% / +0.08		

Kum. Volumen	Geld Volumen	Preis	Brief Volumen	Kum. Volumen
		11.58	37'190 (13)	529'938 (194)
		11.57	10'926 (6)	492'748 (181)
		11.56	21'161 (10)	481'822 (175)
		11.55	87'423 (29)	460'661 (165)
		11.54	70'998 (21)	373'238 (136)
		11.53	28'044 (14)	302'240 (115)
		11.52	59'817 (18)	274'196 (101)
		11.51	45'389 (27)	214'379 (83)
		11.50	75'978 (24)	168'990 (56)
		11.49	93'012 (32)	93'012 (32)
8'515 (6)	8'515 (6)	11.48		
50'348 (17)	41'833 (11)	11.47		
93'565 (30)	43'217 (13)	11.46		
143'378 (46)	49'813 (16)	11.45		
158'145 (53)	14'767 (7)	11.44		
192'481 (62)	34'336 (9)	11.43		
242'941 (70)	50'460 (8)	11.42		
278'683 (73)	35'742 (3)	11.41		
353'618 (79)	74'935 (6)	11.40		
362'848 (81)	9'230 (2)	11.39		
Kum. Volumen	Geld Volumen	Preis	Brief Volumen	Kum. Volumen

Figure: Cumulative Order Book during Continuous Trading

The values in brackets in the "Bid volume/Ask volume" column show the number of buy or sell orders. The numbers in brackets in the two "Cum. volume" columns represent the cumulative number of buy and sell orders respectively.

The following order book excerpts are used to illustrate the matching rules:

Examples in the table with the blue background (double entry order book): The limits on the buy and sell side are each sorted by price-time priority – Neighbour View.

Purchase							Sale
Time	**Order Size**	**Bid Size**	**Bid**	**Ask**	**Ask Size**	**Order Size**	**Time**
10:20:32 10:21:10	100 150	250	42	43	100	100	10:18:36
9:48:56	200	200	41	44	400	200 200	10:20:34 10:15:22
10:25:55	100	100	40	45	300	300	10:21:12

Examples in the table with the grey background (single entry order book): Limits are sorted from top to bottom in the Price column – Tower View.

Time	Order Size	Bid Size	Price	Ask Size	Order Size	Time
			45	300	300	10:21:12
			44	400	200 200	10:20:34 10:15:22
			43	100	100	10:18:36
10:20:32 10:21:10	100 150	250	42			
9:48:56	200	200	41			
10:25:55	100	100	40			

Depending on the trading segment, SIX Swiss Exchange offers market participants different order book depths. Through IMI, access to unlimited order book depth is available for both partitions.

Product	Order book depth for participants
Swiss Blue Chip Shares	30
Mid-/Small-Cap Shares	10
Secondary Listing Shares	10
Separate Trading Lines	10
Rights and Options	10
Investment Funds	10
Sponsored Foreign Shares	5
Exchange Traded Products und Sponsored Funds	5
Bonds	5
Structured Products/Warrants	1 (inside market price/best bid and ask price)

Directive 3: Trading, Section 6

10.1 Price-Time Priority

As a rule, the price-time priority principle applies. This means that the order and quote with the better price (highest price limit for buy side, lowest price limit for sell side) is executed first. Unlimited orders enjoy top priority when consolidating orders and quotes. For orders and quotes with the same price, the order or quote received first shall also be executed first. Unlimited orders and quotes have the highest priority for matching.

For orders and quotes with the same price, the order or quote received first is also executed first.

Explain it – Video

11 Interruption of Trading

To ensure an orderly market the Exchange may interrupt trading, in particular if:

a) in the Central Limit Order Book market model during continuous trading, the next price compared to the reference price is outside a bandwidth **(Stop Trading Range)** determined by the Exchange **(Stop Trading)**;
b) in the Central Limit Order Book market model during continuous trading, the next price compared to a transaction is within a certain time period **(Avalanche Time)**, outside a range **(Stop Trading Range)** determined by the Exchange **(Avalanche Stop Trading)**;
c) in the market models Quote Driven Market and Price Validation Market during continuous trading, there is no quote in the order book on the opposite side at the time of a possible execution **(Stop Trading No Quote)**. Trading shall not be interrupted if a limited order with the same price remains in the order book on the same side (buy/sell) of the order book as the quote executed last, provided that the limited order was already in the order book at the time of the execution of the quote;
d) in the Price Validation Market market model, a possible execution between an order and a quote occurs during continuous trading (Price Validation Phase);
e) not all unlimited orders in an auction can be executed **(Non-Opening)**. The trading interruption lasts until all unlimited orders can be executed. In the case of a “Non-Opening” in the Quote Driven Market and Price Validation Market market models, trading may be interrupted again after the “Non-Opening” (pursuant to letter c) of this clause) prior to the trade; or
f) at the opening or in the closing auction, the next price compared to the reference price is outside of a bandwidth determined by the Exchange **(Delayed Range)** or not all unlimited orders can be executed **(Delayed Auction)**;
g) trading in the underlying is interrupted **(Underlying Condition)**.

Market Model	Interruption Type	Condition	Duration
Continuous Trading	Stop Trading during Continuous Trading	The next potential price compared to the reference price is outside of the Stop Trading Range.	Trading is interrupted for the Stop Trading Duration.
	Avalanche Stop Trading during Continuous Trading	The next potential price compared to a transaction is outside of the Stop Trading Range within a certain time period (Avalanche Time).	Trading is interrupted for the Stop Trading Duration.
	Delayed Opening	The Theoretical Opening price compared to the reference price is outside of the Delayed Opening Range at the uncross of the Opening Auction.	Trading is interrupted for the Delay Opening Duration.
	Delayed Closing	The Theoretical Closing price compared to the reference price is outside of the Delayed Closing Range at the uncross of the Closing Auction.	Trading is interrupted for the Delay Closing Duration.
Quote Driven Market Price Validation Market	Delayed Opening No Quote Stop Trading No Quote	There is no quote on the opposite side of the order book at the time of a potential execution during the Opening Auction or Continuous Trading.	Trading is interrupted for the Delay Opening / Stop Trading Duration unless a quote is entered.

The Stop Trading Range and the Stop Trading Duration, as well as the Avalanche Time connected with the Avalanche Stop Trading shall be determined by the Exchange per trading segment. The Exchange shall publish exceptions for individual securities and trading days in a suitable manner.

The participant may enter new orders and quotes during a trade suspension or delete existing ones.

After expiry of a trading interruption, the book shall be reopened with an auction in accordance with the principle of highest executable volume. The Exchange may set a random end for the opening of trading after a trading interruption per trading segment, whereby a Random Time Interval of 30 seconds for all Trading Segments will be applied, except for Structured Products, which will have a Random Time Interval of 5 seconds.

The Exchange shall publish exceptions for individual securities or trading days in a suitable manner.

Market control interventions remain reserved in accordance with the "Market Control" Directive.

Sample question:

After Stop Trading on the Central Limit Order Book

Answers:

a) the issue in question will no longer open if Stop Trading occurs after 4.30 pm
b) non-opening may occur under certain circumstances
c) trading will resume in accordance with the principle of highest executable volume
d) the price fluctuation that triggered the stop trading must be eliminated

Answer: b), c)

Reasons: At the end of the interruption, trading will resume with an auction in accordance with the principle of highest executable volume. In the event of a market order overhang, the status will switch to non-opening.

11.1 Overview of Trading Interruptions

Equity Market					
	Delayed Opening	**Stop Trading**	**Avalanche Stop Trading**	**Non-Opening**	**Underlying Condition**
Blue Chip Shares	**5-minute** interruption, if deviation is **5%** or greater	**5-minute** interruption, if deviation is **1.50%** or greater	Avalanche time **10 seconds** Duration and deviation same as for stop trading	Yes	No
Mid-/Small-Cap Shares	**15-minute** interruption, if deviation is **2%** or greater SMIM securities **5-minute** interruption, if deviation is **2%** or greater	**15-minute** interruption, if deviation is **2%** or greater SMIM securities **5-minute** interruption, if deviation is **2%** or greater	Avalanche time **10 seconds** Duration and deviation same as for stop trading	Yes	No
Secondary Listing Shares	**5-minute** interruption, if deviation is **2%** or greater	**5-minute** interruption, if deviation is **2%** or greater	Avalanche time **10 seconds** Duration and deviation same as for stop trading	Yes	No
Separate Trading Lines Rights	No	No	No	Yes	Interruption if underlying instrument is not being traded
Sponsored Foreign Shares	**5-minute** interruption, if there are executable orders with no quotes in the order book	**5-minute** interruption, if there are executable orders with no quotes in the order book	No	Yes	No

Full details for all other trading segments can be found in the "Trading Guide".

12 Extraordinary Situations

12.1 Suspension

SIX Swiss Exchange may temporarily suspend trading in a security if extraordinary circumstances so warrant. SIX Swiss Exchange will determine the duration of any suspension on a case-by-case basis, and this should generally be kept as short as possible.

When assessing whether to impose a suspension, and the duration of the suspension, the interest in maintaining open, transparent markets and continuous pricing must be weighed against the interest in ensuring uniform access to information on price-sensitive facts for all investors.

The introducing participant or the issuer may submit a request for suspension to the Exchange. The Exchange may also decide to suspend trading in a security. If possible, requests should be submitted not less than 90 minutes before trading opens. By way of exception, trading may be suspended during continuous trading. SIX Swiss Exchange will consult with the introducing participant or with the issuer where possible.

12.2 Emergency Deletions

In the event of the failure of a participant's access system, the participant may request emergency deletions of orders and/or quotes. Any orders that are not entered via OTI will remain effective if the participant loses its connection. The participant must contact Market Control with regard to any emergency deletions. A request for emergency deletions should be made by telephone. The SIX Swiss Exchange Market Control team performs emergency deletions. However, it may also decline requests for emergency deletions in exceptional circumstances. Participants must confirm any emergency deletion by e-mail. Emergency deletions cannot be carried out during opening and at close of trading. Market Control may perform emergency deletions at various levels:

At participant or trader level:

- All orders and quotes
- All orders and quotes for a particular security
- All orders and quotes for a particular segment
- All orders and quotes for products with a specific underlying instrument

At security level:

- Individual STI orders*
- Individual order groups* (for batch entries of OTI orders or quotes)

At OTI / QTI user level:

- All quotes (forced logoff of a market maker)
- All orders via OTI

*Emergency deletions for individual orders or individual order groups may be refused.

13 Pre-Trade Controls

According to Art. 30 FMIA and Art. 30 para. 2 d FMIO, the trading venue must have effective systems, procedures and precautions in place to reject orders that exceed the specified quantity and price thresholds or are clearly incorrect.

Control	Description
Price Collar	The order is automatically rejected by the system if the price of the order exceeds the upper price limit. The upper Price Collar = Reference Price x Price Collar Factor
	The system automatically rejects the order if the price of the order exceeds the lower price limit. The lower Price Collar = Reference Price/Price Collar Factor
Maximum Order Value	The system automatically rejects the order if the value of the order exceeds the maximum order value. Maximum Order Value = Order Quantity x Order Price
Maximum Order Volume	The system automatically rejects the order if the quantity of the order exceeds the maximum order volume. Maximum Order Volume = Maximum Order Value/Reference Price

The Price Collar Factor used to calculate the price range, as well as the Maximum Order Value, are determined by the Exchange for each trading segment.

For Retail orders, the Exchange shall validate pre-trade controls both when the orders are entered into the exchange system and when they are triggered in the corresponding order book.

The details are laid down in the "Trading Parameters" Guideline and the Trading Guide / Product Guide (Link).

14 Matching Rules

The following rules are used at SIX Swiss Exchange for the purpose of executing orders:

Matching Rules for Auctions

These apply to all situations other than continuous trading, such as opening, re-opening after interruption of trading and the closing auction.

Matching Rules for Continuous Trading

These apply to active securities during continuous trading when the order book status is normal.

Which matching rule applies will depend on:

- the market model
- the trading period (e.g. pre-opening, continuous trading, close of trading)
- the order book status (e.g. non-opening, delayed opening, stop trading, delayed opening with non-opening, stop trading with non-opening)
- the status of the securities (e.g. active, underlying condition, suspended)

14.1 Reference Price

Under normal circumstances the reference price is the most recently paid price. This becomes the comparison price for various calculations and serves as the basis for price determination.

14.1.1 Reference Price Adjustment

The Exchange may adjust the reference price in the following cases, in particular:

14.1.1.1 Adjustments after the Close of Trading

If there is no trade on the Exchange in the order book during trading hours, despite an open order book. The reference price shall be adjusted as follows after the close of trading:

1. for trading segments of the equity market: For the reference price adjustment the Exchange will consider the bid and ask price at the close of trading.

2. for all other trading segments: For the reference price adjustment the Exchange will consider the bid and ask price in the last hour before the close of trading.

In both cases: If the previous reference price is lower than the best bid price, the reference price shall be the best bid price. If the previous reference price is higher than the best ask price, the reference price shall be the best ask price. If, at the close of trading, there is no bid price and no ask price in the order book, the reference price shall not be adjusted.

14.1.1.2 The Trade that led to the Reference Price was cancelled by the Exchange.

If the trade which resulted in the reference price has been cancelled by the Exchange. The reference price shall be adjusted as follows after the close of trading:

If a valid on-exchange, off-order-book trade has taken place during trading hours, the reference price shall be the last on-exchange price listed in the order book. If there has been no valid on-exchange, onorder-book trade during trading hours, the reference price shall be determined pursuant to the "Adjustements after the close of trading" see above.

14.1.1.3 Capital Events (Dividend Payment, Split, Spin-Off, etc.)

If dividends on a security are paid out in the trading currency. On the Ex-date, the Exchange shall adjust the reference price by the amount of the dividend prior to the opening of trading.

14.1.1.4 Price Step Adjustment

The Exchange adjusts the reference price prior to the opening of trading if the reference price does not correspond to the new valid price steps.

14.2 Simplified Overview of Matching Rules

In this chapter we are discussing the following market models with pre-trade transparency:

- Central Limit Order Book (CLOB)
- Quote-Driven-Market (QDM)
- Price Validation Market (PVM) for Structured Products (based on QDM)

In these market models there are two types of execution provisions:

- Execution provisions for auctions (principle of highest executable volume)
- Execution provisions for continuous trading

This gives rise to four scenarios in which the execution provisions must be applied. These scenarios may involve different order types. The most common situations are shown in the chart below:

Overview of Matching Rules			
Central Limit Order Book (CLOB)		**Quote-Driven-Market (QDM)**	
Auction (Principle of Highest Executable Volume)	**Continuous Trading**	**Auction (Principle of Highest Executable Volume)**	**Continuous Trading**
Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refers to volume	Market vs. Market → RP Market vs. Limit → Limit Limit vs. Limit → 1. Limit	Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refers to volume	Market vs. Market** → RP Market vs. Limit** → Limit Limit vs. Limit** → 1. Limit Quote vs. Quote → 1. Quote Quote vs. Limit → Quote Quote vs. Limit → Limit, if > and older
Interruption of Trading (Principle of Highest Executable Volume)	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**
Difference relative to RP in the Opening Auction too large: Delayed Opening An overhang of market orders: Non Opening	Difference relative to RP too large: Stop Trading	No Quote in the Opening Auction: Delayed Opening No Quote An overhang of market orders: Non Opening	No Quote on the opposite side of the incoming order: Stop Trading No Quote**

Explanatory Notes:

- Market vs. Market = →RP: market orders are matched against market orders at the reference price. Non-opening will occur if it is not possible to assign all market orders.
- Market vs. Limit → Limit : If market orders are matched with limit orders, they will be matched at the limit of the limit orders
- Limit vs. limit ≠ → where there are different limits with different volumes, the higher volume will be used for the order limit at opening.
- Limit vs. Limit = → ø: where there are different limits with identical volumes, the opening price will be the arithmetical mean (only applies to interruption of trading.
- Limit vs. Limit → 1. Limit: any limit that reaches the order book during continuous trading will be matched at the price of the limit that is already in the book.
- Quote vs. Quote → as for limit : any quote that reaches the order book during continuous trading will be matched at the price of the quote that is already in the book
- Quote vs. Limit → Quote: «Quote Domination» applies.
- Quote vs. Limit → Limit, if > and older : if a quote reaches the order book during continuous trading and meets a limit, the price will only equal the limit if the volume for the limit is higher. Otherwise the «Quote Domination» applies.

Once the price has been determined, it is always essential to check whether a "better" limit than the price established remains in the order book. If this is the case, this limit must be used for matching purposes.

Please note:

These simplified rules are not intended to cover all possible scenarios and contingencies.

14.3 Auction and Highest Executable Volume

Directive 3: Trading, Section 7

14.3.1 Principle of Highest Executable Volume

Prior to the auction, the participant may enter new orders and quotes in the order book or delete existing ones without executions coming about.

The price of the auction shall be determined taking into account all limited and unlimited orders and quotes in the order book, however without taking into account Auction Volume Discovery Orders, and, in certain cases, by the reference price. Orders and quotes shall be treated equally in the auction.

According to the principle of highest executable volume, the largest possible quantity executable is executed at a single specified price.

Example: Principle of Highest Executable Volume

The order book is in an auction.

Cumulative Volume	Bid Size	Price	Ask Size	Cumulative Volume
100	100	Market		
		47.00	400	1,700
		46.00	300	1,300
500	400	45.00	200	1,000
820	**320**	**44.00**	**100**	**800**
1,320	500	43.00	500	700
1,720	400	42.00		
		Market	200	200

Result:

In the opening 800 units will be executed at a price of CHF 44.00.

Explanation:

At a price of CHF 45.00, only 500 units can be executed (cumulative volume bid size).

At a price of CHF 43.00, only 700 units can be executed (cumulative volume ask size).

Explain it – Video

14.3.2 Auction Matching Rules

Overview of Matching Rules			
Central Limit Order Book (CLOB)		**Quote-Driven-Market (QDM)**	
Auction (Principle of Highest Executable Volume)	**Continuous Trading**	**Auction (Principle of Highest Executable Volume)**	**Continuous Trading**
Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market → RP Market vs. Limit → Limit Limit vs. Limit → 1. Limit	Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market** → RP Market vs. Limit** → Limit Limit vs. Limit** → 1. Limit Quote vs. Quote → 1. Quote Quote vs. Limit → Quote Quote vs. Limit → Limit, if > and older
Interruption of Trading (Principle of Highest Executable Volume)	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**
Difference relative to RP in the Opening Auction too large: Delayed Opening An overhang of market orders: Non Opening	Difference relative to RP too large: Stop Trading	No Quote in the Opening Auction: Delayed Opening No Quote An overhang of market orders: Non Opening	No Quote on the opposite side of the incoming order: Stop Trading No Quote**

Explanatory Notes - Auctions CLOB and QDM:

- Market vs. Market = →RP: market orders are matched against market orders at the reference price. «Non-Opening» will occur if it is not possible to assign all market orders.
- Market vs. Limit → Limit : If market orders are matched with limit orders, they will be matched at the limit of the limit orders
- Limit vs. limit ≠ → where there are different limits with different volumes, the higher volume will be used for the order limit at opening.
- Limit vs. Limit = → ø: where there are different limits with identical volumes, the opening price will be the arithmetical mean.

<u>During auctions orders and quotes are treated equally.</u>

The following rules apply:

a) Orders must be considered in accordance with the price-time priority principle.

b) Unlimited orders must be executed with unlimited or limit orders on the opposite side. If it is not possible to execute all market orders, no orders are executed and the order book remains closed (**non-opening**). Valid orders remain in the order book.

c) Orders must be executed until one side of the book is empty or the best bid price remaining in the order book is lower than the best ask price.

d) If two market orders for the same quantity are executed last, the auction price is equal to the reference price. If the reference price is lower (higher) than the best remaining buy (sell) order on the book, this remaining order determines the auction price – see example 6.

e) If one unlimited and one limit order are executed last, the price of the auction will correspond to the remaining limit.

f) If limit orders of different quantities are executed at two price levels last, the price of the auction will correspond to the price level of the bigger order quantity.

g) If two orders for the same quantity limited at two price steps were executed last, the price is the arithmetical mean of the two price steps, **<u>rounded up</u>** to the next valid price step. If the arithmetical mean is lower (higher) than the best remaining buy (sell) order on the book, this remaining order determines the auction price.

The following examples are derived from these rules, which are set forth in Directive 3: Trading, Section 7:

1. Example: Market Orders with same volume

Execution of unlimited orders/market orders of the same volume against each other at the reference price.

Reference Price: CHF 45.00

Bid Size	Bid	Ask	Ask Size
500	M	M	500

Bid Size	Price	Ask Size
500	Market	500

In this order book situation the price is equal to the reference price.

➔ 500 units executed at the reference price of CHF 45.00

2. Example: Market Orders with limits remaining in the book

The limits remaining on the order book determine the price for execution of market orders of the same volume if

Example A: Reference price < remaining buy limit ➔ price = remaining buy limit (CHF 46.00)

Reference Price: CHF 45.00

Bid Size	Bid	Ask	Ask Size
500	M	M	500
200	46.00		

Bid Size	Price	Ask Size
500	Market	500
200	46.00	

Since the reference price is lower than the remaining buy limit, the buy limit determines the price.

➔ 500 units executed at CHF 46.00

Example B: Reference price > remaining sell limit ➔ price = remaining sell limit (CHF 44.00)

Reference Price: CHF 45.00

Bid Size	Bid	Ask	Ask Size
500	M	M	500
		44.00	100

Bid Size	Price	Ask Size
500	Market	500
	44.00	100

Since the reference price is higher than the remaining sell limit, the sell limit determines the price.
➔ 500 units executed at CHF 44.00

This leads to the following simplification:

If a reference price and limit must be used to determine the price

- the higher of the two determines the price if a buy order remains in the order book
- the lower of the two determines the price, if a sell order remains on the order book.

3. Example: Matching at the best remaining limit

If market and limit orders meet, matching (according to the Principle of Highest Executable Volume) is always at the best remaining limit.

Example A:

Bid Size	Bid	Ask	Ask Size
500	M	43.00	100
		44.00	400
		45.00	100

Bid Size	Price	Ask Size
500	Market	
	45.00	100
	44.00	400
	43.00	100

In this order book situation the price is equal to the best remaining sell limit (CHF 44.00).

➔ 500 units executed at CHF 44.00 (best remaining sell limit)

Example B:

Bid Size	Bid	Ask	Ask Size
500	Market	44.00	500

Bid Size	Price	Ask Size
500	Market	
	44.00	500

In this order book situation the price is equal to the sell limit (CHF 44.00), since there are no better sell limits remaining.

➔ 500 units executed at CHF 44.00

Please note:

The term "remaining" could be misconstrued, since the limit that it refers to is still included in the execution, or used as an alternative execution result to be compared with the reference price. This is how Directive 3 is officially worded.

What is meant is that this is the last opportunity to match the bid and ask side.

In Example 4.1, for example, the limit of 44.00 is matched with the market order, i.e. it does not "remain" after matching during opening after interruption of trading. However, this would be the last limit order available for matching with the buy side.

4. Example : Limit Orders with different limits and volumes

If limit orders with **different limits and volumes** are matched, the price is determined by the limit with the higher order volume.

Example A: Buy Order volume > Sell Order volume

Bid Size	Bid	Ask	Ask Size
700	45.00	44.00	100

Bid Size	Price	Ask Size
700	45.00	
	44.00	100

The price is equal to the limit with the highest order volume.

➔ 100 units executed at CHF 45.00

Example B: Sell Order volume > Buy Order volume

Bid Size	Bid	Ask	Ask Size
300	45.00	44.00	700

Bid Size	Price	Ask Size
300	45.00	
	44.00	700

The price is equal to the limit with the highest order volume.

➔ 300 units executed at CHF 44.00

5. Example : Limit Orders with different limits and same volumes

If limit orders with different limits and the same volume are matched, the price is determined from the arithmetical mean of the limits (rounded up to the nearest valid price step).

Bid Size	Bid	Ask	Ask Size
700	45.00	44.00	700

Bid Size	Price	Ask Size
700	45.00	
	44.00	700

Example with no Price Stepping:

The price is equal to the arithmetical mean.
➔ 700 units executed at CHF 44.50

Example with Price Stepping of CHF 1.00:

The price is equal to the arithmetical mean (rounded value).
➔ 700 units executed at CHF 45.00

6. Example : Limit Orders with different limits and same volumes and additional Limit Order

If the best remaining buy limit (sell limit) on the order book is higher (lower) than the arithmetical mean, the price is determined by the latter.

Example A: Buy limit > arithmetical mean

Bid Size	Bid	Ask	Ask Size
700	45.00	44.00	700
100	44.75		

Bid Size	Price	Ask Size
700	45.00	
100	44.75	
	44.00	700

The price is equal to the remaining buy limit, since it is higher than the arithmetical mean (CHF 44.50).

➔ 700 units executed at CHF 44.75

Example B: Sell limit < arithmetical mean

Bid Size	Bid	Ask	Ask Size
700	45.00	44.00	700
		44.40	100

Bid Size	Price	Ask Size
700	45.00	
	44.40	100
	44.00	700

The price is equal to the remaining sell limit, since it is lower than the arithmetical mean (CHF 44.50).

➔ 700 units executed at CHF 44.40

7. Example

The order book is in an auction. No orders can be executed.

Reference Price: CHF 55.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	50.00	53.00	120	Order
Order	200	49.00	56.00	100	Order
Order	100	48.00			
Order	500	46.00			

Type	Bid Size	Price	Ask Size	Type
		56.00	100	Order
		53.00	120	Order
Order	100	50.00		
Order	200	49.00		
Order	100	48.00		
Order	500	46.00		

Result:

The theoretical auction price cannot be determined. The order book switches

- with **CLOB** and **QDM** to status “Trading” without any orders being executed

8. Example

The order book is in an auction.

No limit order remains on the order book that is better than the arithmetical mean of the last two limit orders executed against one another.

Price Steps (Tick Size): CHF 1.00

Reference Price: CHF 41.00

Arithmetical Mean: CHF 39.50
(rounded up to CHF 40.00)

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	40.00	39.00	100	Order
Order	200	39.00			

Type	Bid Size	Price	Ask Size	Type
Order	100	40.00		
Order	200	39.00	100	Order

Result:

The theoretical auction price is CHF 40.00.

- With **CLOB** 100 units are executed at opening at CHF 40.00 (rounded arithmetical mean).
- With **QDM**, the book will move, without quotes in the order book, into the status “Delayed Opening No Quote”. All things being equal, the book will pass into the status “Trading” with 100 units executed at CHF 40.00 (rounded arithmetical mean).

14.4 Continuous Trading

Overview of Matching Rules			
Central Limit Order Book (CLOB)		**Quote-Driven-Market (QDM)**	
Auction (Principle of Highest Executable Volume)	**Continuous Trading**	**Auction (Principle of Highest Executable Volume)**	**Continuous Trading**
Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market → RP Market vs. Limit → Limit Limit vs. Limit → 1. Limit	Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market** → RP Market vs. Limit** → Limit Limit vs. Limit** → 1. Limit Quote vs. Quote → 1. Quote Quote vs. Limit → Quote Quote vs. Limit → Limit, if > and older
Interruption of Trading (Principle of Highest Executable Volume)	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**
Difference relative to RP in the Opening Auction too large: Delayed Opening An overhang of market orders: Non Opening	Difference relative to RP too large: Stop Trading	No Quote in the Opening Auction: Delayed Opening No Quote An overhang of market orders: Non Opening	No Quote on the opposite side of the incoming order: Stop Trading No Quote**

Explanatory Notes for CLOB and QDM:

- Market vs. Market →RP: market orders are matched against market orders at the reference price.
- Market vs. Limit → Limit : If market orders are matched with limit orders, they will be matched at the price of the limit orders
- Limit vs. Limit → 1. Limit: any limit that reaches the order book during continuous trading will be matched at the price of the limit that is already in the book.

With QDM the following Notes have to be added:

- Quote vs. Quote → as for limit : any quote that reaches the order book during continuous trading will be matched at the price of the quote that is already in the book
- Quote vs. Limit → Quote: «Quote Domination» applies.
- Quote vs. Limit → Limit, if > and older : if a quote reaches the order book during continuous trading and meets a limit, the price will only equal the limit if the volume for the limit is higher. Otherwise the «Quote Domination» applies.

In continuous trading, transactions are triggered by an incoming order or quote which is executed with the orders or quotes on the opposite side of the order book to the extent the quantity and limit allow it. In contrast to interruptions of trading, the price for each transaction is determined individually**.**

The following rules apply:

a. Incoming orders are checked for feasibility and immediately executed, applying the price-time priority principle, against orders or quotes on the opposite side of the order book in one or more steps at one or more prices.

b. If an order is not executed or only partially executed, it is placed in the order book with any limit and a time stamp, subject to other order validities.

c. If an incoming unlimited order is executed against an unlimited order on the opposite side of the order book, the trade is executed at the reference price. If the reference price is lower (higher) than the best buy order (sell order) remaining on the book, this will determine the price of execution.

d. If an incoming unlimited order is executed against a limit order on the opposite side of the order book, the price will be equal to the limit.

e. If an incoming limit order is executed against a market order on the opposite side of the order book, the price is equal to the limit. If the executed limit is lower (higher) than the best buy order (sell order) remaining on the opposite side of the order book, this will determine the price of execution.

f. If an incoming limit order is executed against a limit order on the opposite side of the order book, the trade will be executed at the common limit price. If the limit of the buy order is higher than the limit of the sell order, the limit which is more beneficial from the standpoint of the incoming order is used.

The above rules are derived from Directive 3: Trading, Section 8

14.4.1 Continuous Trading under the CLOB Market Model

Overview of Matching Rules			
Central Limit Order Book (CLOB)		**Quote-Driven-Market (QDM)**	
Auction (Principle of Highest Executable Volume)	**Continuous Trading**	**Auction (Principle of Highest Executable Volume)**	**Continuous Trading**
Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market → RP Market vs. Limit → Limit Limit vs. Limit → 1. Limit	Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market** → RP Market vs. Limit** → Limit Limit vs. Limit** → 1. Limit Quote vs. Quote → 1. Quote Quote vs. Limit → Quote Quote vs. Limit → Limit, if > and older
Interruption of Trading (Principle of Highest Executable Volume)	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**
Difference relative to RP in the Opening Auction too large: Delayed Opening An overhang of market orders: Non Opening	Difference relative to RP too large: Stop Trading	No Quote in the Opening Auction: Delayed Opening No Quote An overhang of market orders: Non Opening	No Quote on the opposite side of the incoming order: Stop Trading No Quote**

Explanatory Notes Continuous Trading CLOB:

- Market vs. Market = →RP: market orders are matched against market orders at the reference price. Non-opening will occur if it is not possible to assign all market orders.
- Market vs. Limit → Limit : If market orders are matched with limit orders, they will be matched at the limit of the limit orders
- Limit vs. Limit → 1. Limit: any limit that reaches the order book during continuous trading will be matched at the price of the limit that is already in the book.

Incoming orders are executed at the price of the existing limit orders. If an order cannot be executed or can be executed only in part, the rest will remain on the order book, subject to any validity specifications to the contrary.

Directive 3: Trading, Section 10

The Exchange may stop trading if:

- the next price is outside a range (the stop trading range) defined by the Exchange in comparison with the reference price (stop trading)

The following examples illustrate the matching rules and the above table of rules. **Incoming orders are marked with an arrow:**

The rules from Directive 3: Trading, Section 8 yield the following table of rules for continuous trading in the CLOB Market Model:

Incoming Order	Orders in Order Book		
	Unlimited Orders (Market Orders)	**Limit Orders**	**Market and Limit Orders**
Market Sell Orders	Reference Price	Highest Buy Limit in Book	Reference Price or Highest Buy Limit (max.) (the higher of the two)
Market Buy Orders	Reference Price	Lowest Sell Limit in Book	Reference Price or Lowest Sell Limit (min.) (the lower of the two)
Limit Sell Orders	Incoming Sell Limit	Highest Buy Limit in Book	Incoming Limit or Limit in Book (max.) (the higher of the two)
Limit Buy Orders	Incoming Buy Limit	Lowest Sell Limit in Book	Incoming Limit or Limit in Book (min.) (the lower of the two)

The following rule applies: the price is determined by the order that is already in the book.

1. Example: Market Order meets Market Order

Reference Price: CHF 45.00

Bid Size	Bid	Ask	Ask Size
→ 500	M	M	500

Bid Size	Price	Ask Size
→ 500	Market	500

→ 500 units executed at the reference price of CHF 45.00

2. Example: Limit Order meets Market Order

Bid Size	Bid	Ask	Ask Size
→ 500	44.00	M	500

Bid Size	Price	Ask Size
	Market	500
→ 500	44.00	

Incoming buy limit determines the price:

→ 500 units executed at CHF 44.00

Bid Size	Bid	Ask	Ask Size
500	M	46.00	500 ←

Bid Size	Price	Ask Size
500	Market	
	46.00	500 ←

Incoming sell limit determines the price:

→ 500 units executed at CHF 46.00

3. Example: Market Order meets Limit Order

Bid Size	Bid	Ask	Ask Size
→ 500	M	44.00	500
		45.00	300

Bid Size	Price	Ask Size
→ 500	Market	
	45.00	300
	44.00	500

Lowest sell limit in the order book determines the price:

→ 500 units executed at CHF 44.00

Bid Size	Bid	Ask	Ask Size
500	43.00	M	500 ←
200	42.00		

Bid Size	Price	Ask Size
	Market	500 ←
500	43.00	
200	42.00	

Highest buy limit in the order book determines the price:

→ 500 units executed at CHF 43.00

4. Example: Limit Order meets Limit Order

Bid Size	Bid	Ask	Ask Size
→ 500	45.00	44.00[a]	500[1]
200	43.00	45.00	200

Bid Size	Price	Ask Size
→ 500	45,00	200
	44,00[a]	500[1]
200	43,00	

Lowest sell limit determines the price (a):

→ 500 units executed at CHF 44.00 (1)

Bid Size	Bid	Ask	Ask Size
→ 500	45,00	44,00[a]	300[1]
200	43,00	45,00[b]	200[2]

Bid Size	Price	Ask Size
→ 500	45,00[b]	200[2]
	44,00[a]	300[1]
200	43,00	

Lowest sell limit determines the price (a):
→ 300 units executed at CHF 44.00 (1)

Lowest sell limit determines the price (b):
→ 200 units executed at CHF 45.00 (2)

Bid Size	Bid	Ask	Ask Size
500[1]	45.00[a]	44.00	500 ←
400	44.00	46.00	300

Bid Size	Price	Ask Size
	46.00	300
500[1]	45.00[a]	
400	44.00	500 ←

Highest buy limit in the order book determines the price (a):

→ 500 units executed at CHF 45.00 (1)

As a rule, the price is determined by the order, which was already in the book.

5. Example: Market Order meets Market and Limit Order

Reference Price: CHF 43.00

Bid Size	Bid	Ask	Ask Size
→ 500	M	M	500
		44.00	200

Bid Size	Price	Ask Size
→ 500	Market	500
	44.00	200

Price is determined by reference price or sell limit in order book (**whichever is lower**):

→ 500 units executed at CHF 43.00

Reference Price: CHF 43.00

Bid Size	Bid	Ask	Ask Size
500	M	M	500 ←
400	44.00		

Bid Size	Price	Ask Size
500	Market	500 ←
400	44.00	

Price is determined by reference price or buy limit in order book (**whichever is higher**):

→ 500 units executed at CHF 44.00

6. Example: Limit Order meets Market and Limit Order

Bid Size	Bid	Ask	Ask Size
→ 500	44.00	M	500
		43,00	200

Bid Size	Price	Ask Size
	Market	500
→ 500	44.00	
	43.00	200

Price is determined by incoming limit or sell limit in order book (**whichever is lower**) (CHF 43.00):

→ 500 units executed at CHF 43.00

Bid Size	Bid	Ask	Ask Size
500[1]	M	45.00	500 ←
400	44.00		

Bid Size	Price	Ask Size
500[1]	Market	
	45.00	500 ←
400	44.00	

Price is determined by incoming limit or buy limit in order book (**whichever is higher**) (CHF 45.00):

→ 500 units executed at CHF 45.00 against the Market Order (1).

14.4.2 Continuous Trading under the Quote-Driven-Market (QDM) Model

Overview of Matching Rules			
Central Limit Order Book (CLOB)		**Quote-Driven-Market (QDM)**	
Auction (Principle of Highest Executable Volume)	**Continuous Trading**	**Auction (Principle of Highest Executable Volume)**	**Continuous Trading**
Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market → RP Market vs. Limit → Limit Limit vs. Limit → 1. Limit	Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market** → RP Market vs. Limit** → Limit Limit vs. Limit** → 1. Limit Quote vs. Quote → 1. Quote Quote vs. Limit → Quote Quote vs. Limit → Limit, if > and older
Interruption of Trading (Principle of Highest Executable Volume)	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**
Difference relative to RP in the Opening Auction too large: Delayed Opening An overhang of market orders: Non Opening	Difference relative to RP too large: Stop Trading	No Quote in the Opening Auction: Delayed Opening No Quote An overhang of market orders: Non Opening	No Quote on the opposite side of the incoming order: Stop Trading No Quote**

Explanatory Notes Continuous Trading in QDM:

- Market vs. Market = →RP: market orders are matched against market orders at the reference price. Non-opening will occur if it is not possible to assign all market orders.
- Market vs. Limit → Limit : If market orders are matched with limit orders, they will be matched at the limit of the limit orders
- Limit vs. Limit → 1. Limit: any limit that reaches the order book during continuous trading will be matched at the price of the limit that is already in the book.

In addition to the above, the rules of **quote-based price determination** are applied in the QDM market model.

Directive 3: Trading, Section 10

- Quote vs. Quote → as for limit : any quote that reaches the order book during continuous trading will be matched at the price of the quote that is already in the book
- Quote vs. Limit → Quote: «Quote Domination» applies.
- Quote vs. Limit → Limit, if > and older : if a quote reaches the order book during continuous trading and meets a limit, the price will only equal the limit if the volume for the limit is higher. Otherwise the «Quote Domination» applies.

An incoming Quote is executed with an existing Order at the Quote price (and not at the Order price) if the Quote quantity is equal to or greater than the Order quantity (Quote Domination). If a better limit than the incoming Quote price remains on the opposite side, then this limit determines the price of the trade.

It must be taken into account whether the incoming Quote volume exceeds the volume on the opposite side in the order book or not. Thus, incoming Quotes are executed at the Quote price or, in the event of a surplus (Orders and Quotes) on the opposite side, at the best Quote or the best remaining limit price (Quote-based pricing).

If limit or market orders meet an order book in which there are no Quotes, trading is interrupted (**"Stop Trading No Quote"**).

The table below presents a summary of the rules for execution of Orders and Quotes in continuous trading under the QDM market model. The best limit/quote always refers to the highest buy limit/quote or the lowest sell limit/quote in the order book.

Incoming Orders/Quotes	Orders/Quotes on opposite Side of Order Book		
	Limit Orders only	**Limit Orders and Quotes**	**Quotes**
Incoming Quote Volume ≥ Total Volume on the Opposite Side...	Incoming Quote	Best Quote in order book	Best Quote in order book
Incoming Quote Volume < Total Volume on the Opposite Side...			
...with incoming Buy Quote	Lowest remaining Sell Limit	Lowest Sell Quote or, where applicable, lowest remaining Sell Limit	Lowest Sell Quote in order book
...with incoming Sell Quote	Highest remaining Buy Limit	Highest Buy Quote or, where applicable, highest remaining Buy Limit	Highest Buy Quote in order book
... with incoming Limit Order or Market Order	Stop Trading	Best Limit/Quote in order book	Best Quote in order book

The Exchange may interrupt trading if there is no quote in the order book at the time of a possible trade on the opposite side.

1. Example: No Orders remain in the book which are better than the Quote

Reference Price = CHF 48.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order[1]	100	51.00	50.00[a]	200	Quote ←
Order	200	49.00			

Type	Bid Size	Price	Ask Size	Type
Order[1]	100	51.00		
		50.00[a]	200	Quote ←
Order	200	49.00		

Price determination: Quote domination, because after execution there's no better price remaining in the book than the incoming Quote price (a).

→ 100 units executed at CHF 50.00 (1)

New Reference Price = CHF 50.00

2. Example: No Orders remain in the book which are better than the Quote

Reference Price = CHF 44.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order[1]	100	46.00	44.00[a]	300	Quote ←
Order[2]	200	45.00			

Type	Bid Size	Price	Ask Size	Type
Order[1]	100	46.00		
Order[2]	200	45.00		
		44.00[a]	300	Quote ←

Price determination: Quote domination, because after execution there's no better price remaining in the book than the incoming Quote price (a).

→ 100 units executed at CHF 44.00 (1)
→ 200 units executed at CHF 44.00 (2)

New Reference Price = CHF 44.00

3. Example: Buy limited Order better than the incoming Quote price

Reference Price = CHF 44.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order[1]	100	46.00	44.00	150	Quote 🡐
Order[2]	100	45.00[a]			
Order	100	44.00			

Type	Bid Size	Price	Ask Size	Type
Order[1]	100	46.00		
Order[2]	100	45.00[a]		
Order	100	44.00	150	Quote 🡐

Price determination: Price of remaining best Buy Order 50 units at CHF 45 (a).

➔ 100 units executed at CHF 45.00 (1)
➔ 50 units executed at CHF 45.00 (2)

4. Example: Quotes and Orders on the opposite side of incoming Quote

Reference Price = CHF 43.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order[1]	100	45.00	39.00	200	Quote 🡐
Order[2]	100	44.00			
Quote	100	43.00[a]			
Order	100	42.00			
Quote	100	41.00			
Order	100	40.00			

Type	Bid Size	Price	Ask Size	Type
Order[1]	100	45.00		
Order[2]	100	44.00		
Quote	100	43.00[a]		
Order	100	42.00		
Quote	100	41.00		
Order	100	40.00		
		39.00	200	Quote 🡐

Price determination: Price of remaining existing Quote 100 units at CHF 43.00 (a).

➔ 100 units executed at CHF 43.00 (1)
➔ 100 units executed at CHF 43.00 (2)

New Reference Price = CHF 43.00

5. Example: with Quotes and Orders on the opposite side of incoming Quote

Reference Price = CHF 43.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order[1]	100	45.00	39.00	300	Quote 🡐
Order[2]	100	44.00			
Quote[3]	100	43.00[a]			
Order	100	42.00			
Quote	100	41.00			
Order	100	40.00			

Type	Bid Size	Price	Ask Size	Type
Order[1]	100	45.00		
Order[2]	100	44.00		
Quote[3]	100	43.00[a]		
Order	100	42.00		
Quote	100	41.00		
Order	100	40.00		
		39.00	300	Quote 🡐

Price determination: Price of matched Quote 100 units at CHF 43.00 (a).
➔ 100 units executed at CHF 43.00 (1)
➔ 100 units executed at CHF 43.00 (2)
➔ 100 units executed at CHF 43.00 (3)

New Reference Price = CHF 43.00

6. Example: with Quotes and Orders on the opposite side of incoming Quote

Reference Price = CHF 43.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order[1]	100	45.00	39.00	400	Quote 🡐
Order[2]	100	44.00			
Quote[3]	100	43.00[a]			
Order[4]	100	42.00			
Quote	100	41.00[b]			
Order	100	40.00			

Type	Bid Size	Price	Ask Size	Type
Order[1]	100	45.00		
Order[2]	100	44.00		
Quote[3]	100	43.00[a]		
Order[4]	100	42.00		
Quote	100	41.00[b]		
Order	100	40.00		
		39.00	400	Quote 🡐

First price determination: Price of matched existing Quote 100 units at CHF 43.00 (a).
➔ 100 units executed at CHF 43.00 (1)
➔ 100 units executed at CHF 43.00 (2)
➔ 100 units executed at CHF 43.00 (3)

Second price determination: Price of remaining Quote 100 units at CHF 41.00 (b).
➔ 100 units executed at CHF 41.00 (4)

New Reference Price = CHF 41.00

7. Example: with Quotes and Orders on the opposite side of incoming Quote

Reference Price = CHF 43.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order[1]	100	45.00	39.00	550	Quote 🡐
Order[2]	100	44.00			
Quote[3]	100	43.00[a]			
Order[4]	100	42.00			
Quote[5]	100	41.00[b]			
Order[6]	100	40.00[c]			

Type	Bid Size	Price	Ask Size	Type
Order[1]	100	45.00		
Order[2]	100	44.00		
Quote[3]	100	43.00[a]		
Order[4]	100	42.00		
Quote[5]	100	41.00[b]		
Order[6]	100	40.00[c]		
		39.00	550	Quote 🡐

First price determination: Price of matched existing Quote 100 units at CHF 43.00 (a).
- ➔ 100 units executed at CHF 43.00 (1)
- ➔ 100 units executed at CHF 43.00 (2)
- ➔ 100 units executed at CHF 43.00 (3)

Second price determination: Price of matched existing Quote 100 units at CHF 41.00 (b).
- ➔ 100 units executed at CHF 41.00 (4)
- ➔ 100 units executed at CHF 41.00 (5)

Third price determination: Price of remaining Order 50 units at CHF 40.00 (c).
- ➔ 50 units executed at CHF 40.00 (6)

New Reference Price = CHF 40.00

8. Example: with Quotes and Orders on the opposite side of incoming Quote

Reference Price = CHF 44.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order[1]	100	45.00	39.00[c]	1000	Quote 🡐
Order[2]	100	44.00			
Quote[3]	100	43.00[a]			
Order[4]	100	42.00			
Quote[5]	100	41.00[b]			
Order[6]	100	40.00			

Type	Bid Size	Price	Ask Size	Type
Order[1]	100	45.00		
Order[2]	100	44.00		
Quote[3]	100	43.00[a]		
Order[4]	100	42.00		
Quote[5]	100	41.00[b]		
Order[6]	100	40.00		
		39.00[c]	1000	Quote 🡐

First price determination: Price of matched existing Quote 100 units at CHF 43.00 (a).
→ 100 units executed at CHF 43.00 (1)
→ 100 units executed at CHF 43.00 (2)
→ 100 units executed at CHF 43.00 (3)

Second price determination: Price of matched existing Quote 100 units at CHF 41.00 (b).
→ 100 units executed at CHF 41.00 (4)
→ 100 units executed at CHF 41.00 (5)

Third price determination: Price of the remaining incoming Quote 500 units at CHF 39.00 (c).
→ 100 units executed at CHF 39.00 (6)

New Reference Price = CHF 39.00

9. Example: Incoming sell order can match but no Quote on the opposite side

Reference Price = CHF 50.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	50.00	49.00	200	Order 🡐
Order	100	49.00			
Order	100	48.00			

Type	Bid Size	Price	Ask Size	Type
Order	100	50.00		
Order	100	49.00	200	Order 🡐
Order	100	48.00		

→ No matching, because there is No Quote on the opposite side of the incoming order.
→ The order book changes the status to "Stop Trading No Quote".

10. Example: incoming sell order matches only against Quote on the opposite side

Reference Price = CHF 50.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Quote[1]	100	50.00[a]	49.00	200	Order ←
Order	100	49.00			
Order	100	48.00			

Type	Bid Size	Price	Ask Size	Type
Quote[1]	100	50.00[a]		
Order	100	49.00	200	Order ←
Order	100	48.00		

Price determination: Price of matched Quote 100 units at CHF 50.00 (a).
→ 100 units executed at CHF 50.00 (1)

No further executions, as there is no more Quote on the opposite side of the incoming order.
→ The order book changes the status to "Stop Trading No Quote".

11. Example: incoming Market sell Order matches against Quotes and Orders

Reference Price = CHF 50.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order[1]	100	52.00[a]	Market	500	Order ←
Quote[2]	300	51.00[b]			
Order[3]	200	51.00[c]			

Type	Bid Size	Price	Ask Size	Type
		Market	500	Order ←
Order[1]	100	52.00[a]		
Quote[2]	300	51.00[b]		
Order[3]	200	51.00[c]		

First price determination: Price of matched Order 100 units at CHF 50.00 (a).
→ 100 units executed at CHF 52.00 (1)

Second price determination: Price of matched Quote 300 units at CHF 51.00 (b).
→ 300 units executed at CHF 51.00 (2)

Third price determination: Price of matched Quote 100 units at CHF 51.00 (c).
→ 100 units executed at CHF 51.00 (3)

Remark: No Stop Trading “No Quote” after the second price determination as the remaining Order(s) can match at the same price as the last matched existing Quote.

14.5 Price Validation Market (PVM) for Structured Products

The Price Validation Market (PVM) for on book trading in Structured Products does not execute orders and quotes immediately but interrupts trading for a pre-defined period in which the Market Maker/Liquidity Provider as well as the clients can validate their price of the order or quote. During the Price Validation Phase there is no pre-trade transparency in the affected order book. After the Price Validation Phase the executing orders and quotes are be matched according to the Auction Matching Rules and the Principle of Highest Executable Volume.

Overview of Matching Rules			
Central Limit Order Book (CLOB)		**Quote-Driven-Market (QDM)**	
Auction (Principle of Highest Executable Volume)	**Continuous Trading**	**Auction (Principle of Highest Executable Volume)**	**Continuous Trading**
Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market → RP Market vs. Limit → Limit Limit vs. Limit → 1. Limit	Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market** → RP Market vs. Limit** → Limit Limit vs. Limit** → 1. Limit Quote vs. Quote → 1. Quote Quote vs. Limit → Quote Quote vs. Limit → Limit, if > and older
Interruption of Trading (Principle of Highest Executable Volume)	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**
Difference relative to RP in the Opening Auction too large: Delayed Opening An overhang of market orders: Non Opening	Difference relative to RP too large: Stop Trading	No Quote in the Opening Auction: Delayed Opening No Quote An overhang of market orders: Non Opening	No Quote on the opposite side of the incoming order: Stop Trading No Quote**
	Explain it – Video	**Price Validation Market for Structured Products (based on QDM)** The Price Validation Market (PVM) model generally corresponds to the existing Quote-Driven Market (QDM) model, with the difference that quotes and orders are not binding and there is a Price Validation Phase before orders are executed against quotes.	

14.5.1 Orders and Quotes

Orders and Quotes in the new Price Validation Market for Structured Products are not binding. Participants may modify or delete their order as well as Market Makers/Liquidity Providers may update or delete their quote(s) during the Price Validation Phase.

14.5.2 Market Model and Matching Rules

The Price Validation Market (PVM) model generally corresponds to the existing Quote-Driven Market (QDM) model, with the difference that quotes and orders are not binding and there is a Price Validation Phase before orders are executed against quotes.

In the new Price Validation Market, in the opening as well as during continuous trading, the matching rules for Auctions and the Principle of Highest Executable Volume are applicable according to Directive 3 Trading / Clause 7, independently of whether orders are executed against each other or orders are executed against quotes.

The table below illustrates the handling:

Matching Situation	Trading Interruption	Duration of interruption	Matching Rules
Order vs. Order	Stop Trading no Quote	30 seconds (no random time)	Auction and Principle of Highest Executable Volume
Order vs. Quote	Price Validation Phase	1 second	Auction and Principle of Highest Executable Volume

Incoming orders and quotes shall be executed in accordance with the price-time priority principle.

If an order or quote cannot or can only be partially executed, the remainder shall remain in the order book. Other order specifications remain reserved.

The Exchange interrupts trading (Price Validation Phase) if an execution between an order and a quote (incoming quote is executed with an existing order or incoming order is executed with an existing quote) can occur. The Exchange shall open continuous trading during the Price Validation Phase as soon as the quote is confirmed or amended, but no later than at the end of the Price Validation Phase. If, during the duration of the Price Validation Phase, the quote or order that could have been executed with an order or quote is deleted or changed, and no further execution can take place during the auction, the Price Validation Phase will be terminated immediately. The Exchange does not publish any pre-trade information during the Price Validation Phase.

In the Price Validation Phase, executable unlimited and limited orders shall be executed against orders and quotes on the opposite side at the quote price regardless of the quote volume (Quote Domination). If orders that can be executed at a price outside of the best quote price (lower than the best price on the buy side or higher than the best quote on the sell side) remain in the order book during the Price Validation Phase, the Exchange shall stop trading (Stop Trading No Quote). If the entire volume of unlimited orders cannot be executed at the quote price, the execution will take place with the maximum available volume on the opposite side at the quote price and the order book will remain closed thereafter (Non Opening). Valid orders or quotes shall remain in the order book

The Exchange shall interrupt trading (Stop Trading No Quote) if two orders can be combined to a trade and there is no quote on the opposite side of the order book at the time of possible execution. The Exchange shall open continuous trading during the trading interruption in accordance with the principle of highest executable volume as soon as a quote has been entered but no later than at the expiry of the trading interruption.

14.5.3 Pre-Trade Transparency

At the start of the Price Validation Phase the order books of the securities will lose their pre-trade transparency status. At the end of a Price Validation Phase consolidated pre-trade updates are published.

14.5.4 Matching Examples

The matching scenarios below provide some examples of how the Price Validation Market behaves. Please note that the following conditions apply for all matching scenarios:
- The order marked in red is the entering order/quote
- The order marked in ~~red and strikethrough~~ is the order/quote being deleted
- The order ID provides an indication in which sequence the orders have entered the book(s)

Further conditions are described in the respective scenario.

Example 1

Scenario 1	Entering Order triggers Price Validation Interruption and Quote is updated with trade
Conditions	Trading Period = Continuous Trading Stop Trading no Quote = 30 Seconds (if applicable)

QDM in Continuous Trading

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					1.05	10,000	-	O1	Normal Good Till Date SWX	9 9000 P
					1.04	100,000	-	Q1	Quote Good for Day SWX	5 5000 P
5 5000 P	Quote Good for Day SWX	Q1	-	100,000	**1.02**	1,000	-	O10	Normal Good Till Date SWX	4 4000 R
7 7000 R	Normal Good for Day SWX	O2	-	1,000	**1.01**					
8 8000 R	Normal Good Till Date SWX	O3	-	5,000	**1.00**					

Result	Price Validation Interruption is triggered

QDM in Price Validation

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					1.05	10,000	-	O1	Normal Good Till Date SWX	9 9000 P
					1.04	100,000	-	Q1	Quote Good for Day SWX	5 5000 P

5 5000 P	Quote Good for Day SWX	Q1	-	100,000	**1.02**	1,000	-	O10	Normal Good Till Date SWX	4 4000 R
7 7000 R	Normal Good for Day SWX	O2		1,000	**1.01**					
8 8000 R	Norma Good Till Date SWX	O3	-	5,000	**1.00**					

Results	During Price Validation the quotes are updated at the same price. Qty 1000 of O10 executes against Q1 at price 1.02 immediately when Q1 is updated. Price Validation Interruption is resolved and Continuous Trading resumes.
Comment	O10 which is triggering the Price Validation Interruption is not published in the market data nor is the order book during the Price Validation interruption.

Example 2

Scenario 2	Entering Order triggers Price Validation Interruption and Quote is updated with trade
Conditions	Trading Period = Continuous Trading Stop Trading no Quote = 30 Seconds (if applicable)

QDM in Continuous Trading

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					1.06	10,000	-	O1	Normal Good Till Date SWX	9 9000 P
					1.04	100,000	-	Q1	Quote Good for Day SWX	5 5000 P
5 5000 P	Quote Good for Day SWX	Q1	-	100,000	**1.02**	1,000	-	O10	Normal Good Till Date SWX	4 4000 R
7 7000 R	Normal Good for Day SWX	O2	-	1,000	**1.01**					
8 8000 R	Normal Good Till Date SWX	O3	-	5,000	**1.00**					

Result: Price Validation Interruption is triggered

QDM in Price Validation

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					1.06	10,000	-	O1	Normal Good Till Date SWX	9 9000 P
					1.05	100,000	-	Q1	Quote Good for Day SWX	5 5000 P

5 5000 P	Quote Good for Day SWX	Q1	-	100,000	**1.03**					
					1.02	1,000	-	O10	Normal Good Till Date SWX	4 4000 R
7 7000 R	Normal Good for Day SWX	O2	-	1,000	**1.01**					
8 8000 R	Normal Good til Date SWX	O3	-	5,000	**1.00**					

Results	During Price Validation the quotes are updated to a better price. Qty 1000 of O10 executes against Q1 at price 1.03 immediately when Q1 is updated. Price Validation Interruption is resolved and Continuous Trading resumes.
Comment	O10 which is triggering the Price Validation Interruption is not published in the market data nor is the order book during the Price Validation interruption.

Example 3

Scenario 3	Entering Order triggers Price Validation Interruption and Quote is updated with no trade
Conditions	Trading Period = Continuous Trading Stop Trading no Quote = 30 Seconds (if applicable)

QDM in Continuous Trading

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					1.06	10,000	-	O1	Normal Good Till Date SWX	9 9000 P
					1.04	100,000	-	Q1	Quote Good for Day SWX	5 5000 P
5 5000 P	Quote Good for Day SWX	Q1	-	100,000	**1.02**	1,000	-	O10	Normal Good Till Date SWX	4 4000 R
7 7000 R	Normal Good for Day SWX	O2	-	1,000	**1.01**					
8 8000 R	Normal Good Till Date SWX	O3	-	5,000	**1.00**					

Result: Price Validation Interruption is triggered

QDM in Price Validation

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					1.06	10,000	-	O1	Normal Good Till Date SWX	9 9000 P
					1.03	100,000	-	Q1	Quote Good for Day SWX	5 5000 P

						1,02	1,000	-	O10	Normal Good Till Date SWX	4 4000 R
	7 7000 R	Normal Good for Day SWX	O2	-	1,000	**1.01**					
	5 5000 P	Quote Good for Day SWX	Q1	-	100,000	**1.01**					
	8 8000 R	Normal Good Till Date SWX	O3	-	5,000	**1.00**					

Results	During Price Validation the quotes are updated to a worse price. No trade can occur during Price Validation Interruption. Price Validation Interruption is resolved due to quote update and Continuous Trading resumes.
Comment	O10 which is triggering the Price Validation Interruption is not published in the market data nor is the order book during the Price Validation interruption. O10 is published in the market data after Price Validation Interruption.

Please note:

Further matching examples can be found in the SWXess Maintenance Release 8.2 (SMR 8.2) (link).

14.6 Matching Rules Examples for Iceberg Orders

In general, the matching rules that apply to Iceberg Orders are the same as for Normal Orders. As a basic principle, the displayed quantity of an Iceberg Order is executed before any further hidden quantity can be executed. Once the displayed quantity has been executed, the next new tranche of the Iceberg Order is displayed in the order book in the specified display size (top-up) with a new time stamp. This tranche is now visible in the order book and becomes executable. If other orders are placed in the order book at the same price level, these orders will have a higher time priority than the new tranche of the Iceberg Order.

During both continuous trading and in an auction the hidden quantity of an Iceberg Order may be executed if, on the opposite side of the order book, more liquidity is available than the displayed quantity of the Iceberg Order. Once the displayed quantity and any other potential orders with a higher price-time priority have been executed, the entire hidden quantity of the Iceberg Order thus becomes executable. This means that even if the hidden quantity of the Iceberg Order becomes executable it will remain hidden from the order book. It is important to note that the total quantity (both hidden and displayed quantity) of an Iceberg Order is executable during an auction. As a result, participants can no longer calculate the theoretical auction price.

14.6.1 Iceberg Orders in Auctions

1. Example

Full execution of Iceberg Order in Auction

	Bid Type	Bid Hidden Quantity	Bid Displayed Quantity	Price	Ask Displayed Quantity	Ask Hidden Quantity	Ask Type
CLOB market model Auction trading period Reference price 88				Market	500	-	Normal
	Iceberg	1,000	100	87			
	Normal	-	200	86	700	-	Normal
Result	**Executions of quantity 1’200 @ price 86**						
Order book after execution							
	Normal	-	100	86			
Note	**The total quantity of the Iceberg Order is executed in the auction.**						

2. Example

Partial execution of Iceberg Order in Auction

	Bid Type	Bid Hidden Quantity	Bid Displayed Quantity	Price	Ask Displayed Quantity	Ask Hidden Quantity	Ask Type
CLOB market model Auction trading period Reference price 88				Market	500	-	Normal
	Normal	-	200	87			
	Iceberg	1,000	100	86	100	-	Normal
Result	**Executions of quantity 600 @ price 86**						
Order book after execution							
	Iceberg	600	100	86			
Note	**A portion of the Iceberg Order is executed during the auction**						

3. Example

Partial execution of Iceberg Order in Auction with no time priority for hidden quantity

	Bid Type	Bid Hidden Quantity	Bid Displayed Quantity	Price	Ask Displayed Quantity	Ask Hidden Quantity	Ask Type
CLOB market model Auction trading period Reference price 88				Market	1,200	-	Normal
	Iceberg	1,000	100	87			
	Normal	-	200	87			
Result	**Execution of quantity 100 @ price 87 (Iceberg Order)** **Execution of quantity 200 @ price 87 (Normal Order)** **Execution of quantity 900 @ price 87 (Iceberg Order)**						
Order book after execution	Iceberg	-	100	87			
Note	**The displayed quantity of the Iceberg Order and the Normal Order are executed before the hidden quantity of the iceberg is executed**						

14.6.2 Iceberg Orders in Continuous Trading

The following scenarios show some examples of how Iceberg Orders are executed in continuous trading.

***Note** that in the following examples, aggressor orders are marked in italics.*

SIX Swiss Exchange distinguishes between poster and aggressor orders. While poster orders provide liquidity to the order book, aggressor orders systematically withdraw liquidity from it. Aggressor orders can be executed without a price limit (best) or with a price limit (limited) against poster orders already in the order book. Resulting trades are therefore charged with a higher ad valorem fee for aggressor orders.

1. Example

Normal Order, execution against displayed volume of an Iceberg Order

	Bid Type	Bid Hidden Quantity	Bid Displayed Quantity	Price	Ask Displayed Quantity	Ask Hidden Quantity	Ask Type
CLOB market model Trading period (cont. trading) Reference price 88				Market	100	-	Normal ←
	Iceberg	1,000	100	87			
Result	**Execution of quantity 100 @ price 87**						
Order book after execution							
	Iceberg	900	100	87			
Note	**New tranche of displayed quantity 100 receives new time stamp**						

2. Example

Normal Order, execution against displayed volume of an Iceberg Order and partial volume of another order

	Bid Type	Bid Hidden Quantity	Bid Displayed Quantity	Price	Ask Displayed Quantity	Ask Hidden Quantity	Ask Type
CLOB market model Trading period (cont. trading) Reference price 88				Market	200	-	Normal
	Iceberg	1,000	100	87			
	Normal	-	200	87			
Result	**Execution of quantity 100 @ price 87 (Iceberg Order) Execution of quantity 100 @ price 87 (Normal Order)**						
Order book after execution	Normal	-	100	87			
	Iceberg	900	100	87			
Note	**New tranche (100) of total quantity receives a new time stamp and can only be executed after the Normal Order with the higher time priority has been executed.**						

3. Example

Normal Order, execution against displayed and hidden quantity of an Iceberg Order

	Bid Type	Bid Hidden Quantity	Bid Displayed Quantity	Price	Ask Displayed Quantity	Ask Hidden Quantity	Ask Type
CLOB market model Trading period (cont. trading) Reference price 88	Iceberg	1,000	100	87	500	-	Normal 🡐
	Normal	-	200	86			
Result	**Execution of quantity 100 @ price 87 (Iceberg Order) Execution of quantity 400 @ price 87 (Iceberg Order)**						
Order book after execution	Iceberg	500	100	87			
	Normal	-	200	86			
Note	**Iceberg Order is best bid order and can therefore execute more than the displayed quantity.**						

4. Example

Displayed and hidden quantity of Iceberg Order are executed against Normal Order

	Bid Type	Bid Hidden Quantity	Bid Displayed Quantity	Price	Ask Displayed Quantity	Ask Hidden Quantity	Ask Type
CLOB market model Trading period (cont. trading) Reference price 88	🡒Iceberg	1,000	100	87	500	-	Normal
	Normal	-	200	86			
Result	**Execution of quantity 500 @ price 87 (Iceberg Order)**						
Order book after execution	Iceberg	500	100	87			
	Normal	-	200	86			
Note	**Iceberg Order is best bid order and can therefore execute more than the displayed portion.**						

14.7 Matching Rules - Stop Trading Examples

Overview of Matching Rules			
Central Limit Order Book (CLOB)		Quote-Driven-Market (QDM)	
Auction (Principle of Highest Executable Volume)	**Continuous Trading**	**Auction (Principle of Highest Executable Volume)**	**Continuous Trading**
Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market → RP Market vs. Limit → Limit Limit vs. Limit → 1. Limit	Market vs. Market =* → RP Market vs. Limit → Limit Limit vs. Limit ≠* → > Limit Limit vs. Limit =* → ø * : = and ≠ refer to volume	Market vs. Market** → RP Market vs. Limit** → Limit Limit vs. Limit** → 1. Limit Quote vs. Quote → 1. Quote Quote vs. Limit → Quote Quote vs. Limit → Limit, if > and older
Interruption of Trading (Principle of Highest Executable Volume)	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**	**Interruption of Trading (Principle of Highest Executable Volume)**
Difference relative to RP in the Opening Auction too large: Delayed Opening An overhang of market orders: Non Opening	Difference relative to RP too large: Stop Trading	No Quote in the Opening Auction: Delayed Opening No Quote An overhang of market orders: Non Opening	No Quote on the opposite side of the incoming order: Stop Trading No Quote**

CLOB in the Opening Auction: If the percentage deviation from the theoretical auction price to the last reference price is greater than the permitted range, the opening is followed by a delayed opening. The Delayed Opening can only happen once a day after the opening.

If not all market orders can be executed (overhang of market orders) within the auction (according to the principle of highest executable volume), the result is a non-opening.

CLOB in Continuous Trading: If trading is interrupted during continuous trading due to too large a price deviation, stop trading occurs. The resumption of trading is resumed by means of an auction according to the principle of highest executable volume.

CLOB in the Closing Auction: At the close of trading with closing auction, the price deviation from the closing price to the last reference price before the start of the closing auction is not checked. Irrespective of the price deviation, execution takes place.

QDM in the Opening Auction: The Exchange shall interrupt trading (Delayed Opening No Quote) if two orders can be combined to a trade and there is no quote on the opposite side of the order book at the time of possible execution. If one of the orders that would lead to an execution is deleted, the order book switches to continuous trading.

If not all market orders can be executed (overhang of market orders) within the auction (according to the principle of highest executable volume), the result is a non-opening

If there is a Quote in the order book during the auction but no execution is possible, the order book switches directly to continuous trading.

QDM in continuous trading: If in continuous trading there is no Quote on the opposite side of the incoming Order, trading is interrupted (Stop Trading no Quote). As soon as a Quote is being entered, but at the latest after expiry of the trading interruption, trading is reopened.

Opening price in the CLOB and QDM: The opening price of the auction, as well as the re-opening price after a trading interruption, is determined by taking into account all limit and unlimited orders and quotes in the order book (according to the principle of highest executable volume), and in certain cases by the reference price.

14.7.1 Non-Opening

1. Non-Opening

The order book is in an auction.

The order book remains closed if it is not possible to fully execute all Market Orders.

Reference Price: CHF 45.00

Bid Size	Bid	Ask	Ask Size
500	M	M	700
100	45.00		

Bid Size	Price	Ask Size
500	Market	700
100	45.00	

Example of Non-Opening: The unlimited Sell Order cannot be completely executed.

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	42.00	M	500	Order
Quote	300	41.00	43.00	300	Order

Type	Bid Size	Price	Ask Size	Type
		Market	500	Order
		43.00	300	Order
Order	100	42.00		
Quote	300	41.00		

➔ Non-opening, TOP is 0 since the volume of the sell market order exceeds the volume of the available buy limits.

14.7.2 Delayed Opening in the CLOB Market Model

1. Example of Delayed Opening: TOP differs from Reference Price by more than the Stop Trading Range

Reference Price: CHF 74.00
Stop Trading Range: 5%

Bid Size	Bid	Ask	Ask Size
500	M	78.00	500
400	76.00	79.00	300

Bid Size	Price	Ask Size
500	Market	
	79.00	300
	78.00	500
400	76.00	

➔ Delayed opening because the TOP of CHF 78.00 differs from the reference price by more than 5%.

2. Example of Delayed Opening: The book only contains limited Orders.

The order book is in an auction. The theoretical auction price leads to a delayed opening.

Stop Trading Range: 5%
Reference Price: CHF 50.00
Arithmetical Mean: CHF 53.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	56.00	50.00	100	Order

Type	Bid Size	Price	Ask Size	Type
Order	100	56.00		
		50.00	100	Order

Result:

The theoretical auction price is CHF 53.00.

The opening is delayed because the theoretical auction differs from the reference price (CHF 50.00) by more than the stop trading range (5%).

3. Example

The order book is in an auction.

The theoretical auction leads to a delayed opening.

Stop Trading Range: 5%
Reference Price: CHF 48.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	56.00	50.00	100	Order
Order	100	54.00			

Type	Bid Size	Price	Ask Size	Type
Order	100	56,00		
Order	100	54.00		
		50.00	100	Order

Result:

The theoretical auction price is CHF 54.00 (since a remaining buy order would be better than the arithmetical mean of the last two limit orders executed against each other). The opening is delayed because the theoretical auction price differs from the reference price by more than the stop trading range.

14.7.3 Delayed Opening in the QDM Market Model

Under the QDM market model, the Exchange extends the auction period once, if two orders can be matched for a trade, but there is no quote in the order book at the time. The Exchange will reopen trading during any interruption as soon as a quote has been entered, but no later than end of the suspension period.

1. Example: Delayed Opening No Quote

The order book is in an auction.
The orders could be executed, but the order book contains no quotes.

Reference Price: CHF 41.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	200	40.00	39.00	100	Order
Order	200	39.00			

Type	Bid Size	Price	Ask Size	Type
Order	200	40.00		
Order	200	39.00	100	Order

Result:

The theoretical auction price is CHF 40.00.
The opening is delayed because there are no quotes in the order book.

At the end of the delayed opening (for example 5 minute for ETFs), the book will open (all things being equal, i.e. no additional order or quote has been entered during the delayed opening period) with an execution of 100 units at CHF 40.00.

2. Example: Delayed Opening No Quote

The order book is in an auction. The order book contains no quotes and the remaining buy limit is better than the arithmetical mean.

Price Steps (Tick Size): CHF 0.25
Reference Price: CHF 41.00
Arithmetical Mean: CHF 39.50

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	40.00	39.00	100	Order
Order	200	39.75			

Type	Bid Size	Price	Ask Size	Type
Order	100	40.00		
Order	200	39.75		
		39.00	100	Order

Result:

The theoretical auction price is CHF 39.75.

The opening is delayed because there are no quotes in the order book.

At the end of the delayed opening period, the market opens, all things being equal, with an execution of 100 at CHF 39.75

3. Example: Delayed Opening No Quote

The order book is in an auction. The order book contains no quotes and the remaining sell limit is better than the arithmetical mean.

Price Steps (Tick Size): CHF 0.25
Reference Price: CHF 41.00
Arithmetical Mean: CHF 39.50

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	40.00	39.00	100	Order
			39.25	200	Order

Type	Bid Size	Price	Ask Size	Type
Order	100	40.00		
		39.25	200	Order
		39.00	100	Order

Result:

The theoretical auction price is CHF 39.25. The opening is delayed because there are no quotes in the order book.

At the end of the delayed opening period, the market opens, all things being equal, with an execution of 100 at CHF 39.25

14.7.4 Stop Trading under the CLOB Market Model

1. Example: A Market Order meets the following situation on the order book:

The order book is in continuous trading.

Reference Price: CHF 45.00
Stop Trading Range: 5%

Bid Size	Bid	Ask	Ask Size
		Market	650 🡐
500	44.00	45.00	500
100	43.00	45.50	250
100	42.00	46.00	100

Bid Size	Price	Ask Size
	Market	650 🡐
	46.00	100
	45.50	250
	45.00	500
500	44.00	
100	43.00	
100	42.00	

→ 500 units executed at CHF 44.00

→ 100 units executed at CHF 43.00

→ Stop trading, the next possible execution corresponds to CHF 42.00

Since within a period of 10 seconds (Avalanche Time) the next possible execution (at CHF 42.00) compared to the reference price (CHF 45.00) would be outside the exchange-defined Stop Trading Range (e.g. 5%), a so-called Avalanche Stop Trading takes place.

2. Example: Stop Trading Range

The order book is in continuous trading. The difference between the achieved price and the reference price exceeds the stop trading range.

Stop Trading Range: 5%
Reference Price: CHF 50.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	56.00	50.00	100	Order 🡐

Type	Bid Size	Price	Ask Size	Type
Order	100	56.00		
		50.00	100	Order 🡐

The result:

The order book changes to "Stop Trading" status, as the next possible execution would be at CHF 56.00 and thus the difference to the last reference price of CHF 50.00 is greater than 5%).

3. Example: Stop Trading Range

The order book is in continuous trading. The difference between the achieved price and the reference price exceeds the stop trading range.

Stop Trading Range: 5%
Reference Price: CHF 50.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	51.00	46.00	1,000	Order 🡐
Order	100	49.00			
Order	100	46.00			

Type	Bid Size	Price	Ask Size	Type
Order	100	51.00		
Order	100	49.00		
Order	100	46.00	1,000	Order 🡐

The result:

Executed:
100 units at a price of CHF 51.00 (CHF 51.00 becomes the new reference price)

100 units at a price of CHF 49.00 (CHF 49.00 becomes the new reference price)

Then the order book changes to "Stop Trading" status, as the next possible execution would be at CHF 46.00 and thus the difference to the reference price of CHF 49.00 would be bigger than 5% (Stop Trading Range).

14.7.5 Stop Trading under the QDM Market Model

1. Example: Limit Order encounters order book with no Quote on opposite side.

Type	Bid Size	Bid	Ask	Ask Size	Type
			72.00	450	Order ←
Order	200	72.00	74.00	500	Quote
Order	200	71.00	75.00	100	Limit

Type	Bid Size	Price	Ask Size	Type
		75.00	100	Order
		74.00	500	Quote
Order	200	72.00	450	Order ←
Order	200	71.00		

→ “Stop Trading No Quote”, since there is no Ouote on the opposite side of the incoming order.

At the end of the stop trading period, 200 units, all things being equal, will be executed at CHF 72.00.

2. Example: Incoming Order, no Quotes in book

The order book is in continuous trading. The incoming order could be executed if there were quotes on the opposite side.

Reference Price: CHF 44.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	100	50.00	49.00	200	Order ←
Order	100	49.00			
Order	100	48.00			

Type	Bid Size	Price	Ask Size	Type
Order	100	50.00		
Order	100	49.00	200	Order ←
Order	100	48 .00		

Result:

No trades are executed. The sell order at CHF 49.00 causes the order book to switch from "Trading" to "Stop Trading No Quote" status because it opposite side contains no Quotes.

After the end of the "Stop Trading No Quote" period, 200 units will be executed at CHF 49.00 in accordance Principle of Highest Executable Volume (reopening after "Stop Trading No Quote"), provided the order book remains unchanged.

3. Example: Incoming Order

The order book is in continuous trading. The incoming order is executed against the existing quote on the order book.

Reference Price: CHF 44.00

Type	Bid Size	Bid	Ask	Ask Size	Type
Quote	100	50.00	49.00	200	Order ←
Order	100	49.00			
Order	100	48.00			

Type	Bid Size	Price	Ask Size	Type
Quote	100	50.00		
Order	100	49.00	200	Order ←
Order	100	48.00		

Result:

Executed:
100 units at a price of CHF 50.00.

Then the order book status switches to "stop trading no quote" because there are no further quotes on the order book. The TOP is CHF 49.00.

At the end of the stop trading period, 100 units, all things being equal, will be executed at CHF 49.00.

4. Example: Incoming Order, no Quotes

The order book is in continuous trading.

The incoming unlimited (market) order could be executed in part, although there is no quote on the opposite side.

Reference Price: CHF 44.00

Type	Bid Size	Bid	Ask	Ask Size	Type
→ Order	1,000	M	51.00	200	Order
Order	200	50.00			

Type	Bid Size	Price	Ask Size	Type
→ Order	1,000	Market		
		51.00	200	Order
Order	200	50.00		

Result:

The order book status switches to "stop trading no quote".

Non-opening (due to a market order overhang).

5. Example: Incoming Order encounters order book with no Quote on opposite side.

*Trading is not interrupted if a limited order remains in the order book at the same price on the same side (purchase/sale) as the last executed quote (in the example CHF 74.00), provided that the limited order was already in the order book at the time of execution of the quote.

Type	Bid Size	Bid	Ask	Ask Size	Type
Order	200	75.00	72.00	450	Order ←
Quote	200	74.00			
Order	100	74.00			

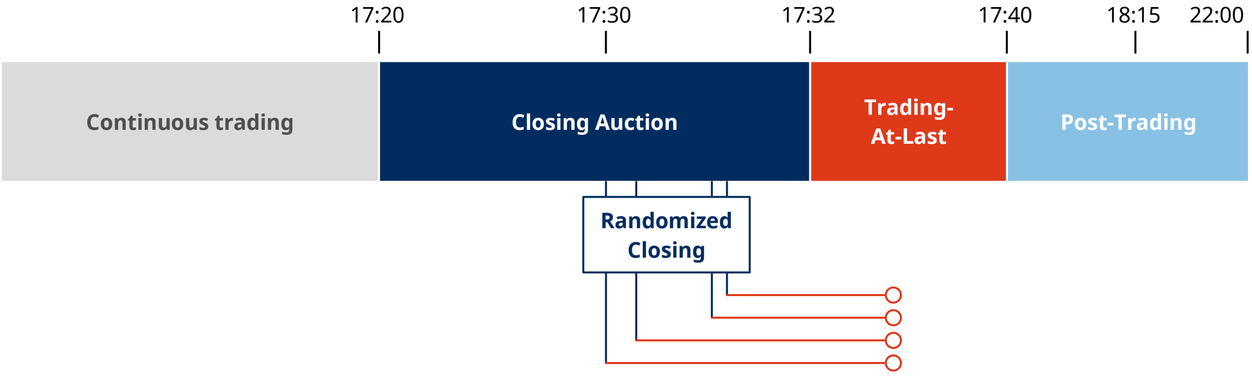
Type	Bid Size	Price	Ask Size	Type
Order	200	75.00		
Quote	200	74.00		
Order	100	74.00		
		72.00	450	Order ←

- → Execution of 200 units at CHF 75.00
- → Execution of 200 units at CHF 74.00 vs Quote
- → Execution of 50 units at CHF 74.00 *

*Trading is not interrupted if a limited order remains in the order book at the same price on the same side (purchase/sale) as the last executed quote (in the example CHF 74.00), provided that the limited order was already in the order book at the time of execution of the quote.

14.8 Trading-At-Last (TAL)

The trading period Trading-At-Last is only applicable to the market model Central Limit Order Book (CLOB) and as a general principle the matching rules of the CLOB are applicable to trades in TAL.



Trading-At-Last is available for

Trading Segment(s)	• Blue Chip Shares (26) • Mid-/Small-Cap Shares (591) • Sparks Shares • Global Depository Receipts • Investment Funds
Order Types	• Normal Orders • Iceberg Orders

Matching during the TAL period is based on the time priority. The price is irrelevant for matching because all executions take place at the Closing Price of the security determined during the Closing Auction. This means that incoming orders at the Closing Price or better (higher bid price or lower ask price) are executed against resting orders at the Closing Price. No additional order/trade quantity rules or restrictions for matching apply in the TAL period.

14.8.1 Pre-Trade Transparency

All TAL orders are executed by reference price systems of the Exchange and are therefore exempted from pre-trade transparency regulations according to Art. 27 para. 4 let.a FMIO.

At the start of the Trading-At-Last trading period the order books of the securities which have TAL enabled will lose their pre-trade transparency. At the end of the TAL period consolidated pre-trade updates are published.

14.8.2 Examples

The matching scenarios below provide some examples for the TAL trading period. Please note that the following conditions apply for all matching scenarios:

- The order marked in red is the entering order

- The order marked in ~~red and strikethrough~~ is the order being deleted

- The order ID provides an indication in which sequence the orders have entered the book(s)

- The trading segment for all scenarios is “Blue Chip Shares”

- Party 1000 and 7000 have TAL Order Transfer = Disabled

- Party 5000 has SMP for CLOB = Enabled

Example 1

Scenario 1	Closing Price during Closing Auction and new order which executes during TAL

CLOB during Closing Auction

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					Market	50	-	O7	Normal Good Till Date SWX	3 3000 R
					104.00	200	-	O6	Normal Good Till Date SWX	1 1000 R
					103.00	100	-	O2	Normal At-the-Close SWX	6 6000 R
5 5000 P	Normal Good for Day SWX	O1	-	100	**102.00**					
7 7000 R	Iceberg Good for Day SWX	O3	90	10	**101.00**					
8 8000 R	Normal Good Till Date SWX	O4	-	50	**100,00**					

Result	50 Shares of O7 are executed against O1 at price CHF 102.00. The Closing Price relevant for TAL is CHF 102.00 O3 is disabled for TAL and thus expired after Closing Auction. O6 is disabled for TAL but not expired

CLOB during TAL

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					104.00	200	-	O6	Normal Good Till Date SWX	1 1000 R

						103.00	100	-	O2	Normal At-the-Close SWX	6 6000 R
	5 5000 P	Normal Good for Day SWX	O1	-	50	**102.00**	100	-	O8	Normal Good for Day SWX	2 2000 R
	8 8000 R	Normal Good Till Date SWX	O4	-	50	**100.00**					
Results					50 Shares of O8 are executed against O1 at price CHF 102.00. O1 is fully matched.						
CLOB in Post-Trading	Bid					Price	Ask				
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
						104.00	200	-	O6	Normal Good Till Date SWX	1 1000 R
	8 8000 R	Normal Good Till Date SWX	O4	-	50	**100.00**					
Results					O2 as well as remaining quantity of O8 are expired at the end of TAL. O6 is reactivated at the end of TAL.						
Comment					Orders which are good for day and disabled for TAL expire after the Closing Auction At-the-Close orders are also valid for TAL. The order book is not visible during TAL.						

Example 2

Scenario 2 Closing Price during Closing Auction and new Sweep Order during TAL

CLOB during Closing Auction

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					Market	50	-	O7	Normal Good Till Date SWX	3 3000 R
					104.00	200	-	O6	Normal Good Till Date SWX	1 1000 R
					103.00	100	-	O2	Normal At-the-Close SWX	6 6000 R
5 5000 P	Normal Good for Day SWX	O1	-	100	**102.00**					
7 7000 R	Iceberg Good for Day SWX	O3	90	10	**101.00**					
8 8000 R	Normal Good Till Date SWX	O4	-	50	**100.00**					

Result

50 Shares of O7 are executed against O1 at price CHF 102.00.
The Closing Price relevant for TAL is CHF 102.00
O3 is disabled for TAL and thus expired after Closing Auction.
O6 is disabled for TAL but not expired

CLOB during TAL

Bid					Price	Ask				
Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
					104.00	200	-	O6	Normal Good Till Date SWX	1 1000 R

						103.00	100	-	O2	Normal At-the-Close SWX	6 6000 R
	5 5000 P	Normal Good for Day SWX	O1	-	50	**102.00**					
						101.00	100		O8	Normal Good for Day SWMX	2 2000 R
	8 8000 R	Normal Good Till Date SWX	O4	-	50	**100.00**					
Results	50 Shares of O8 are executed against O1 at price CHF 102.00. O1 is fully matched.										
CLOB in Post-Trading	Bid					Price	Ask				
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
						104.00	200	-	O6	Normal Good Till Date SWX	1 1000 R
	8 8000 R	Normal Good Till Date SWX	O4	-	50	**100.00**					
Results	O2 as well as remaining quantity of O8 are expired at the end of TAL. O6 is reactivated at the end of TAL.										
Comment	Sweep Orders are immediately forwarded to CLOB during TAL. During TAL orders at the Closing Price or better are considered for matching The order book is not visible during TAL.										

Example 3

Scenario 3	Closing Price during Closing Auction and new Sweep Order during TAL										
	Bid					Price	Ask				
CLOB during Closing Auction	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
						Market	50	-	O7	Normal Good Till Date SWX	3 3000 R
						104.00	200	-	O6	Normal Good Till Date SWX	1 1000 R
						103.00	100	-	O2	Normal At-the- Close SWX	6 6000 R
	5 5000 P	Normal Good for Day SWX	O1	-	100	**102.00**					
	7 7000 R	Iceberg Good for Day SWX	O3	90	10	**101.00**					
	8 8000 R	Normal Good Till Date SWX	O4	-	50	**100.00**					

Result

50 Shares of O7 are executed against O1 at price CHF 102.00.
The Closing Price relevant for TAL is CHF 102.00
O3 is disabled for TAL and thus expired after Closing Auction.
O6 is disabled for TAL but not expired

	Bid					Price	Ask				
CLOB during TAL	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
						104.00	200	-	O6	Normal Good Till Date SWX	1 1000 R

						103.00	100	-	O2	Normal At-the-Close SWX	6 6000 R
	5 5000 P	Normal Good for Day SWX	O1	-	50	**102.00**					
						101.00	100		O8	Normal Fill-Or-Kill SWX	2 2000 R
	8 8000 R	Normal Good Till Date SWX	O4	-	50	**100.00**					
Results				O8 cannot be fully matched and is therefore deleted without execution.							

CLOB in Post-Trading	Bid					Price	Ask				
	Entity Party Capacity	Type Validity Routing	ID	Hidden Qty	Visible Qty		Visible Qty	Hidden Qty	ID	Type Validity Routing	Entity Party Capacity
						104.00	200	-	O6	Normal Good Till Date SWX	1 1000 R
	8 8000 R	Normal Good Till Date SWX	O4	-	50	**100.00**					

Results	O1 as well as O2 are expired at the end of TAL. O6 is reactivated at the end of TAL.
Comment	Fill-Or-Kill orders must be fully matched during TAL otherwise they expire. The order book is not visible during TAL.

15 Alternative Trading

The following chapter describes the following trading services:

- SwissAtMid (Mid-Point Order Book (MPOB) and Plus Orders)
- SwissAtMid Block Order
- Quote on Demand (QOD)
- Swiss EBBO Book

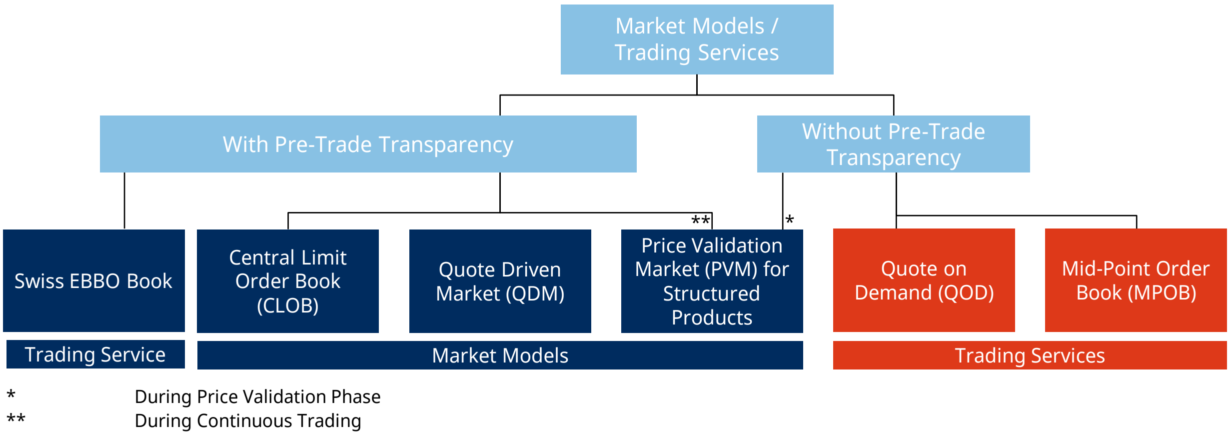


Figure: Overview Market Models

15.1 SIX Swiss Exchange at Mid-Point (SwissAtMid)

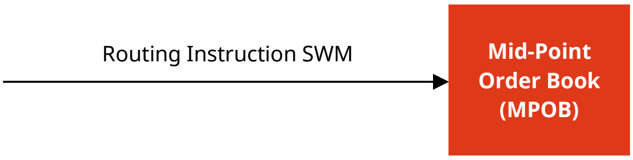
SwissAtMid is a service for the trade without pre-trade transparency with executions at Mid-Point Price. The trading segments Blue Chip Shares, Mid-/Small-Cap Shares, Investment Funds and Sparks Shares as well as Global Depository Receipts (GDRs) can be traded in SwissAtMid. This service is available to all participants of SIX Swiss Exchange.

Mid-Point Order Book Matching supported for …	
Trading Interfaces	• Standard Trading Interface (STI) • OUCH Trading Interface (OTI)
Market Data Interfaces	• SIX MDDX Multi-Dimensional Data fluX®Interface (SIX MDDX) • ITCH Market Data Interface (IMI)
Trading Segments	• Blue Chip Shares • Mid-/Small-Cap Shares • Sparks Shares • Global Depository Receipts • Investment Funds
Trading Period	• Continuous Trading
Order Types	• Normal Order • Iceberg Order • Block Order (only for Blue Chip Shares and Mid-/Small-Cap Shares)
Routing Instruction	• Mid-Point Order Book only (SWM) • Sweep Mid-Point Order Book to the Central Limit Order Book (SWMX) • SwissAtMid Block Order (SWML) (only for Blue Chip Shares and Mid-/Small-Cap Shares)

Price Type	• Limited • Unlimited
Order Validity	• Day • Immediate or Cancel (IoC) • Fill or Kill (FoK) • Good till Date (STI only)

15.1.1 Routing Instruction SWM – SwissAtMid

«SWM» for entry in the order book without pre-trade transparency for SwissAtMid. This is supported for Normal Orders with or without a price limit; or



15.1.2 Trading Day and Hours

The trading days and hours of SwissAtMid comply with the trading hours of the Central Limit Order Book
of the respective Trading Segment or security. Orders in SwissAtMid can only be executed when the CLOB of the respective security is in the trading status «Continuous Trading».

Book	Trading Periods				
CLOB	Pre-opening	Opening	Continuous Trading	End of Trading (Closing Auction)	Post-Trading
SwissAtMid (MPOB)	Primary Condition	Primary Condition	Continuous Trading	MPOB Post Trading	MPOB Post Trading
	No executions	No executions	Executions	No executions	No executions

15.1.3 Trade Suspension

Trading in SwissAtMid shall be interrupted if and for as long as

- no Mid-Point Price for the relevant security can be calculated on the Primary Reference Market; or
- the relevant security is not in the trading period "Continuous Trading" on the Primary Reference Market (i.e. Pre-opening, Opening, Closing Auction or Post-trading); or
- trading in the relevant security on the Primary Reference Market is interrupted (i.e. Delayed Opening, Stop Trading or Non-Opening), or is suspended from trading; or
- the price of the next execution in SwissAtMid at the Mid-Point Price compared to the Reference price on the Primary Reference Market is outside a range determined by the Exchange (Stop Trading). The bandwidth (Stop Trading Range) of the interruption in trading in SwissAtMid is determined by the trading segment on the Primary Reference Market of the relevant security, and is laid down in the corresponding annex to the "Trading Parameters" Guideline.

The participant may enter new orders during a trade suspension or delete existing ones.

15.1.4 Quantity-Time Priority

Binding "In-limit" orders in the SwissAtMid order book are considered for execution. "In-limit" orders are defined as those for which the limited price corresponds at least to the Mid-Point Price of the respective security on the Primary Reference Market, or is higher (the price limit for buy orders is equal to or higher than the Mid-Point Price or the price limit for sell orders is equal to or lower than the Mid-Point Price). Unlimited orders are always deemed to be "in limit".

The quantity-time priority principle means that binding "in-limit" orders with the greater quantity shall be executed first. For orders with the same quantity, the order received first shall also be executed first.

15.1.5 Mid-Point Price Execution

Orders shall be executed against each other at the Mid-Point Price, which means the mid-point between the highest displayed bid price and the lowest displayed ask price on the Primary Reference Market at the time of the trade. For the SwissAtMid trading service, the Primary Reference Market is always the Central Order Limit Book (CLOB) of the corresponding securites at SIX Swiss Exchange.

Example:

Mid-Point Price

MPOB	**Mid-Point Price = 14.50**				
Time Order Type	**Bid Size**	**Bid**	**Ask**	**Ask Size**	**Time Order-Type**
10:50:32 SWM	1,000	15.00	14.00	1,000	10.49:1 SWM
Result:	Trade 1,000 @ 14.50				

CLOB					
Time	**Bide Size**	**Bid**	**Ask**	**Ask Size**	**Time**
10:49:45	500	14.00	15.00	600	10:49:50

An incoming order shall be checked for feasibility and shall be executed in accordance with the quantity time priority with orders on the opposite side of the SwissAtMid order book in one or more steps. The following rules shall apply here:

- If the incoming order is equal to or larger than the sum of the executable orders on the opposite side of the order book, these orders will be executed in full. Any remaining order quantity from the incoming order will be placed in the SwissAtMid order book.
- If the incoming order is smaller than the sum of the executable orders on the opposite side of the order book, these orders will be executed up to their respective maximum quantities.

The Exchange may provide Self-Match Prevention for trading in SwissAtMid. At the request of the participant, opposite buy and sell orders under their own participant identification (Member ID) which are flagged as own transactions will not be executed via the SwissAtMid order book. Opposite buy and sell orders shall remain in the SwissAtMid order book.

15.1.6 Minimum Execution Quantity (MEQ)

The minimum executable quantity must be fulfilled for each transaction of an order (example: 300 for each transaction). A single order on the other side of the order book must be equal to or greater than the MEQ for an execution to occur.

When the remaining size of an order falls below the MEQ, then the MEQ corresponds to the remaining order size (example: last trade 100).

MPOB		Mid-Point Price = 14.50				
#	Time Order Type	Bid Size (MEQ)	Price	Ask Size (MEQ)	Time Order Type	#
1 ➔	10:50:32 SWM	1,100 (300)	15.00			
			14.50	300	10.49:15 SWM	3
			14.15	400 (300) 300	10:49:20 SWM 10:49:10 SWM	4 5
			14.00	100	10:48:20 SWM	6
2	10:49:20 SWM	100	13.00			
Results:		Trade 400 (#1, #4) @ 14.50 Trade 300 (#1, #5) @ 14.50 Trade (#1, #3) @ 14.50 Trade (#1, #6) @ 14.50				

Remark:

The Minimum Execution Quantity (MEQ) is supported for resting (SWM) and Sweep Orders (SWMX). In case of Sweep Orders, the Minimum Execution Quantity will be ignored in the Central Limit Order Book (CLOB).

15.1.7 Tick Steps

The following price steps apply in SwissAtMid:

- Blue Chip Shares 0.0001
- Mid-/Small-Cap Shares 0.0001

The corresponding Mid-Point Price in SwissAtMid is always rounded up to four decimal places.

Example

MPOB	Mid-Point Price = 0.4996				
Time Routing Instru-ction	Bid Size	Bid	Ask	Ask Size	Time Routing Instru-ction
10:50:32 SWM	1,000	0.4996	Market	1,000	10.49:15 SWM
Result:	Trade 1,000 @ 0.4996				

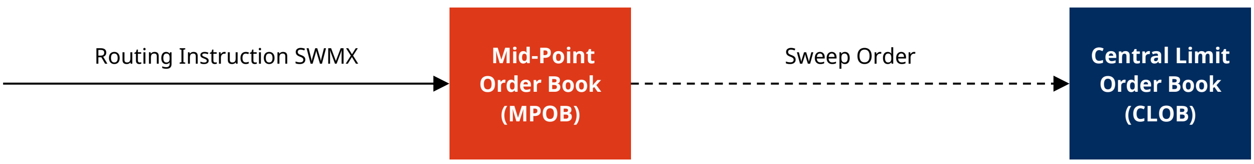
CLOB					
Time	Bid Size	Bid	Ask	Ask Size	Time
10:49:45	500	0.4995	0.4996	600	10:49:50

15.2 SwissAtMid Sweep - Routing Instruction SWMX

«SWMX» for entry in the order book without pre-trade transparency for SwissAtMid and subsequent forwarding of the remaining quantity to the Central Limit Order Book (CLOB). The Routing Instruction «SWMX» is supported for Orders with or without a price limit. If the order book without pre-trade transparency is not activated for a given trading segment, orders with Routing Instruction «SWMX» are forwarded directly to the Central Limit Order Book (CLOB) or to the Quote-Driven-Market order book.

If an order with Routing Instruction «SWMX» is entered while the order book is not in the continuous trading period, it will be forwarded directly to the Central Limit Order Book (CLOB) or to the Quote-Driven-Market (QDM) order book.

Existing orders with the Routing Instruction “SWMX” are directly forwarded to the Central Limit Order Book (CLOB) or to the Quote Driven Market (QDM) order book in the closing auction and during the Trading-At-Last period. Orders with Routing Instruction «SWMX» follow the execution provisions of the order book in question in continuous trading; or



The system first checks, if there is an execution in the Mid-Point Order Book (MPOB) is possible or not. Sweep Orders which cannot be executed fully or partially in the MPOB will be transferred to the Central Limit Order Book (CLOB) with the same time stamp.

Example:

MPOB	Mid-Point Preis = 14.50				
Time Order Type	**Bid Size**	**Bid**	**Ask**	**Ask Size**	**Time Order Type**
10:48:32 SWM	1,000	15.00	Sweep – same time stamp		

CLOB					
Time	**Bid Size**	**Bid**	**Ask**	**Ask Size**	**Time**
10:48:32 SWM	1,000	15:00	15.00	600	10:49:50
10:49:45	500	14.00			
Result:	Trade 600 @ 15.00				

Check for further information Directive 5: Alternative Trading

15.3 Limit Plus and Iceberg Plus Orders

Plus Orders with the "SWMB" routing instruction allow simultaneous placement in the Central Limit Order Book (CLOB) and in the SwissAtMid (MPOB) order book without pre-trade transparency. Participants can define a minimum execution quantity and control how they interact with liquidity in SwissAtMid. The Minimum Execution Quantity is only taken into account in the SwissAtMid market model, i.e. in the Central Limit Order Book (CLOB) executions below the Minimum Execution Quantity can take place.

Limit Plus Orders

The Limit Plus Order (Normal Order type with Routing Instruction «SWMB») allows participants to place their orders into both books simultaneously, so that the orders are fully visible in the Central Limit Order Book (CLOB), but also fully available for execution in SwissAtMid.

Iceberg Plus Orders

The Iceberg Plus Order (Iceberg Order type with Routing Instruction «SWMB») is an enhanced version of today's Iceberg Order, namely that the Iceberg Plus Order is represented in both books simultaneously. While the visible quantity of the Iceberg Plus Order is shown in the Central Limit Order Book (CLOB), the full order size will be available for execution in SwissAtMid.

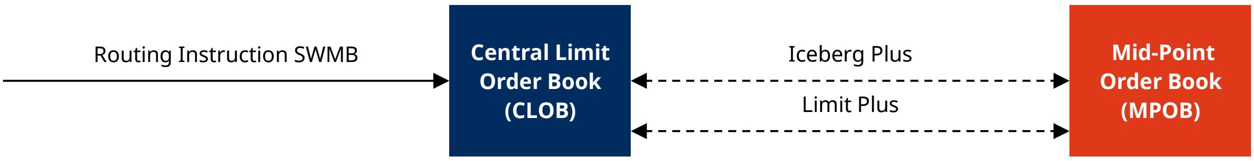
Explain **it – Video**

15.3.1 Routing Instruction SWMB – simultaneous entry in SwissAtMid and CLOB

"SWMB" for the entry into the Central Limit Order Book (CLOB) and simultaneous entry into the order book without pre-trade transparency from SwissAtMid; it the quantity of the order with Routing Instruction "SWMB" instruction in the Central Limit Order Book or the order book without pre-trade transparency for SwissAtMid is executed, the total quantity of the order in the order book in question will be reduced by the quantity that has been executed, until the total order quantity has been executed or deleted, or has expired.

The Routing Instruction "SWMB" is supported for Orders with a price limit. The stated price limit applies to executions on SwissAtMid, and as a maximum limit for the Central Limit Order Book (CLOB). For executions in the Central Limit Order Book (CLOB), the Exchange adjusts the price limit for orders with Routing Instruction "SWMB" dynamically to the best bid or ask price.

If the order book without pre-trade transparency is not activated for a given trading segment, orders with Routing Instruction "SWMB" will be rejected. If the Central Limit Order Book (CLOB) is not in the trading period "Continuous Trading" or if there is a trade suspension, the order with Routing Instruction "SWMB" is suspended in both order books and as such is neither executable nor visible in the order book. Once the Central Limit Order Book (CLOB) is again in continuous trading, suspended orders are reactivated, have a new time stamp and are visible in the order book. Existing orders with Routing Instruction "SWMB" are deleted in the closing auction. Orders with routing instruction "SWMB" are rejected during the Trading-At-Last period. The Exchange may limit the number of orders with Routing Instruction "SWMB" that are permitted in each order book. Orders with Routing Instruction "SWMB" follow the execution provisions of the order book in question in continuous trading.



	Limit Plus	**Iceberg Plus**
Quantity	• CLOB Total quantity is displayed and executable • MPOB No pre-trade transparency but total quantity is executable	• CLOB Only visible size is displayed and executable • MPOB No pre-trade transparency but total quantity is executable Note that for Iceberg Plus Orders the Minimum Order Value of CHF 10'000 applies.
Secondary Quantity Constraints and usage of Secondary Quantity depends on the Validity and the Routing Instruction.	Optional attribute and defines the Minimum Execution Quantity applicable for SwissAtMid and ignored for CLOB.	Mandatory attribute and defines the Minimum Execution Quantity applicable for SwissAtMid and at the same time the Visible Quantity for the CLOB. Note that for Iceberg Plus Orders the Visible Quantity for the CLOB can be randomized within a system wide configured range.
Price Order price may differ between CLOB and MPOB Generally the price must be on a valid price step for the respective security in the CLOB. If Limit Plus or Iceberg Plus is entered with a global limit which is not a valid price step in the	• CLOB Dynamic adjustment of the order price to the best bid or ask in the CLOB whilst observing the Global Limit • MPOB Global Limit	• CLOB Dynamic adjustment of the order price to the best bid or ask in the CLOB whilst observing the Global Limit • MPOB Global Limit

CLOB, the price may be rounded to a valid price step whilst staying within the global limit.	

15.3.2 Partial Execution

If a partial quantity of the order is executed in CLOB or MPOB, the total quantity of the order in the respective order book is reduced by the quantity executed until the total quantity has been executed, deleted or expired.

Example Limit Plus Order
Buy order 500 shares
Limite 101 (Global Limit)
Execution of the first partial quantity

MPOB Mid-Point Price = 100.5						
#	Time Order Type	Bid Size	Price	Ask Size	Time Order Type	#
1	13.16 SWMB	500	101			
			100	300	13.11 SWM	2
Result:		Trade 300 (#1, #2) @ 100.5				

CLOB						
#	Time Routing Instruc-tion	Bid Size (Global Limit)	Price	Ask Size (Global Limit)	Time Routing Instruc-tion	#
			101	500	13.12 SWX	5
3	13.15 SWX	600	100			
4	13.16 SWMB	500 (101)				
Result:		No Trade				

After the first partial execution of 300 shares, the volume in both market models will be reduced by 300.

MPOB		Mid-Point Price = 100.5				
#	Time Routing Instruction	Bid Size (MEQ)	Price	Ask Size (MEQ)	Time Order Type	#
1	SWMB	200	101			
Result:	No Trade					

CLOB						
#	Time Routing Instruction	Bid Size (Global Limit)	Price	Ask Size (Global Limit)	Time Routing Instru-ction	#
			101	500	SWX	5
3	13.15 SWX	600	100			
4	13.16 SWMB	200 (101)				
Result:	No Trade					

Reduction of 300 in both market models

15.3.3 Dynamic Price Adjustment in CLOB

Limit Plus and Iceberg Plus support the functionality that SIX Swiss Exchange dynamically adjusts the order price relevant for execution in the Central Limit Order Book (CLOB) according to the Best Bid

Offer (BBO) in the Central Limit Order Book whilst always ensuring that the global limit of the order as defined by the Participant is never breached.

The price/time priority in the Central Limit Order Book is lost in the event that the price of a Limit Plus and Iceberg Plus Order is dynamically adjusted to the BBO of the CLOB. That means all resting orders with Routing Instruction «SWX» with price equal to BBO, entered before the dynamically adjusted Limit Plus and Iceberg Plus Orders, will be executed first.

Before

Price	Global Limit	ID	Routing
100	-	6	SWX
	101	3	SWMB
	102	5	SWMB
	100	11	SWMB
	-	12	SWX
	101	13	SWMB
98	-	1	SWX
	-	4	SWX
	-	7	SWX
97	-	2	SWX
	-	8	SWX

NEW

After

Price	Global Limit	ID	Routing
101	-	14	SWX
	101	15 (3)	SWMB
	102	16 (5)	SWMB
	101	17 (13)	SWMB
	-	6	SWX
	100	11	SWMB
	-	12	SWX
98	-	1	SWX
	-	4	SWX
	-	7	SWX
97	-	2	SWX
		8	SWX

Comment: The order ID 14 enters the CLOB and becomes the new BBO. Because the BBO isn't better as the global prices of the sitting Plus Orders ID 3,5 and 13, these orders are adjusted and get a new order number, i.e. 15 (3), 16 (5) and 17 (13), respectively. The price of the resting order ID 11 is not adjusted to new BBO because the BBO is better than order ID 11 global limit price of 100 (the global limit of the Limit Plus and Iceberg Plus Orders as defined by the Participant is never breached).

Before

Price	Global Limit	ID	Routing
~~101~~	~~-~~	~~14~~	~~SWX~~
	101	15(3)	SWMB
	102	16(5)	SWMB
	101	17(13)	SWMB

After

Price	Global Limit	ID	Routing
100	-	6	SWX
	100	11	SWMB
	-	12	SWX

100	-	6	SWX		101	18 (15/3)	SWMB
	100	11	SWMB		102	19 (16/5)	SWMB
	-	12	SWX		101	20 (17/13)	SWMB
98	-	1	SWX	98	-	1	SWX
	-	4	SWX		-	4	SWX
	-	7	SWX		-	7	SWX
97	-	2	SWX	97	-	2	SWX
	-	8	SWX		-	8	SWX
Comment	After deleting the order ID 14 (the current BBO) there is a new BBO (order ID 6). The resting orders with Routing Instruction “SWMB” (order ID 15, 16, 17) are adjusted and get a new order number (18(15/3), 19 (16/5) and 20 (17/13), respectively. The resting orders with Routing Instruction “SWMB” (ID 11) is not adjusted because the BBO isn’t better as this orders Global Limit. If the BBO in the CLOB is better than the Global Limit, the Limit Plus and Iceberg Plus Orders are displayed in the CLOB at their global limit and are not dynamically adjusted.						

15.3.4 Inactivation/Reactivation of Plus Orders

If the order book state changes from Continuous Trading into a non-trading status (Stop Trading, Delay Opening, Non-Opening, Suspension, Closing Auction, Break), Limit Plus and Iceberg Plus Orders will become inactive in non-trading phases and will automatically be reactivated when the order book resumes Continuous Trading again.

If the Central Limit Order Book (CLOB) does not contain a bid or ask price, the order is suspended in both order books and is thus neither executable nor visible in the order book. Suspended orders are reactivated as soon as a corresponding bid or ask price is available in the Central Limit Order Book (CLOB). These orders are thus executable, have a new time stamp and are visible in the order book.

15.3.5 Order Entry, Expiry and Deletion

The following overview describes the Limit Plus and Iceberg Plus Order handling in the various trading states, periods and interruptions

Type	CLOB State	MPOB State	Handling of orders with Routing instruction “SWMB”
Trading Periods	Pre-Opening Opening	Primary Condition	New order entry with Routing Instruction “SWMB” accepted and order becomes inactive until the state changes to Continuous Trading. Reactivation of order is depending on conditions in chapter 15.3.4. No open orders with Routing Instruction “SWMB” in the books from previous trading day because only validity “Good for Day” is supported.
	Continuous Trading	Continuous Trading	Order entry and maintenance of Routing Instruction “SWMB” possible. Former inactive Plus Orders are reactivated and integrated into order book if conditions are met. If maximum number of orders with Routing Instruction “SWMB” is reached, new order entry rejected with reason “R” (order is not allowed at this time).
	End of Trading (with or without Closing Auction)	Post-Trading	New order entry with Routing Instruction “SWMB” rejected with reason “R” (order is not allowed at this time). Open orders with Routing Instruction “SWMB” are expired with reason “T” (Timeout. Session/day order got expired).
	Post-Trading	Post-Trading	New order entry with Routing Instruction “SWMB” rejected with reason “R” (order is not allowed at this time). No open orders with Routing Instruction “SWMB” in the books from trading day because only validity “Good for Day” is supported.
Trading States	Suspension Underlying Condition Break	Primary Condition Primary Condition Primary Condition	New order entry with Routing Instruction “SWMB” accepted and order becomes inactive until the state changes to Continuous Trading. Reactivation of order is depending on conditions in chapter 15.3.4. Open orders with Routing Instruction “SWMB” become inactive and are reactivated when state changes to Continuous Trading.

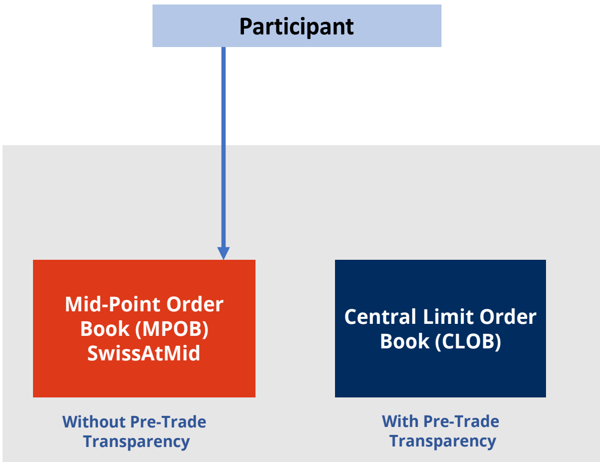
	Active	MPOB Suspension	Order entry and maintenance of Routing Instruction “SWMB” possible. Executions possible only in CLOB.
Trading Interruptions	Stop Trading (Regular and Avalanche)	Primary Condition	New order entry with Routing Instruction “SWMB” accepted and order becomes inactive until the state changes to Continuous Trading. Reactivation of order is depending on conditions in chapter 15.3.4. Open orders with Routing Instruction “SWMB” become inactive and are reactivated when state changes to Continuous Trading.
	Delay Opening	Primary Condition	
	Non-Opening	Primary Condition	
	Active	MPOB Stop Trading	Order entry and maintenance of Routing Instruction “SWMB” possible. Executions possible only in CLOB.

In the event of an intraday recovery, orders are persisted (deleted). STI Plus Orders become inactive (no silent deletion of such Plus o1515yarders anymore). The processing of OTI Plus Orders does not change, they will be deleted.

15.4 SwissAtMid Block Order

This order type offers order entry and execution of indicative and binding Block Orders at or above a pre-defined Minimum Block Order Value Threshold (Large In Scale) defined per security.

Explain it – Video



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

Phase in which the participant may submit a firmed-up Block Order to execute. Binding Block Orders are firm upon submission and can therefore execute at any time.

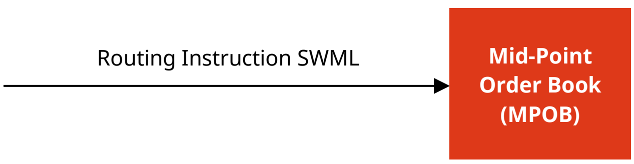
15.4.1 Routing Instruction SWML

“SWML” for entry of Block Orders in the order book without pre-trade transparency in SwissAtMid; it is supported for Block Orders with or without a price limit. If the order book without pre-trade transparency or the order type Block Order is not activated for a given trading segment, orders with Routing Instruction “SWML” will be rejected. Block Orders with Routing Instruction “SWML” follow the execution provisions of the order book without pre-trade transparency in Continuous Trading.

Order Condition	Indicative	Firmed-up	Binding
Description	Non-firm Indicative Block Orders are nonexecutable Block Orders. If a potential match is available in the SwissAtMid trading service, a Firm-up Request is sent to the participant and their Indicative Block Order is automatically canceled. The Firm-up Request invites them to participate in a Firm-up Phase in which they can enter a Firmed-up Block Order which references the original Indicative Block Order.	Firm Firmed-up Block Orders are firm Block Orders, entered during a Firm-up Phase, following receipt of a Firm-up request and automatic cancellation of the related Indicative Block Order. Firmed-up Block Orders must reference the original Indicative Block Order.	Firm Binding Block Orders are firm orders at entry and require no firm-up in order to execute. They are immediately available to matching in the SwissAtMid order book.
Condition for Matching	- No matching is possible - Potential matches are identified, and Firm-up Requests sent	Matching is in accordance with the Mid-Point Order Book size/time priority and subject to Minimum Block Order Value Threshold constraints.	Matching is in accordance with the Mid-Point Order Book size/time priority and subject to Minimum Block Order Value Threshold constraints.

Type of firm-up phase for indicative Block Orders:

- Manual: Can be set by the participant for indicative Block Orders via the Standard Trading Interface (STI); or
- Automatic: applies to all indicative Block Orders via the OUCH Trading Interface (OTI) and can be set by the participant for indicative Block Orders via the Standard Trading Interface (STI).



15.4.2 Firm-up phase for indicative Block Orders

Indicative Block Orders in the order book without pre-trade transparency are non-binding when entered and thus cannot be executed. If an indicative Block Order or several indicative Block Orders with one or more orders on the opposite side of the order book without pre-trade transparency SwissAtMid according to quantity-time priority at the Mid-Point Price of the primary reference market can be executed, the Exchange shall start one or several parallel firm-up phase(s).

Participants are invited to firm-up their indicative Block Orders during the firm-up phase. When invited to the firm-up phase, the indicative Block Order is deleted from the order book and the participant can enter a firmed-up Block Order with reference to the indicative Block Order during the firm-up phase. Participants can change the attributes of the Block Order when firming-up indicative Block Orders. As soon as all indicative Block Orders have been confirmed, but no later than after completion of the firm-up phase, one or more trades are executed in the SwissAtMid order book, provided that the conditions for executions pursuant to Clause 9.10 are met.

If there are any possible trades between manual and automatic indicative Block Orders during a firm-up phase, the participants with manual indicative Block Orders will first receive the invitation to firm-up, and only when all manual indicative Block Orders have been firmed-up, but at the latest after the end of the firm-up phase, the participants with automatic indicative Block Orders will receive the invitation to firm-up. If only manual or automatic indicative Block Orders are involved in a firm-up phase, all participants will receive the invitation to firm-up the indicative Block Orders at the same time. The participant will receive its current performance score with each invitation to a firm-up of an indicative Block Order.

5 The duration of the firm-up phase for indicative Block Orders is determined per trading segment. The details are laid down in the “Trading Parameters” Guideline.

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

Attribut	Indicative Block Orders	Firmed-up Block Orders	Binding Block Orders	Normal and Iceberg SwissAtMid Orders
Triggering of Firm-up Requests	May trigger multiple Firm-up Requests to be sent to other indicative Block Orders to participate in the same Firm-up Phase.	Firmed-up Block Orders entered as part of a Firm-up Phase and “locked” in the Firm-up phase may not trigger any Firm-up Requests. Residual Firmed-up Block Orders resting in the SwissAtMid (not Fill or Kill or Immediate or Cancel) can trigger multiple Firm-up Requests over the course of the trading day but only one at a time.	Binding Block Orders with validity good-for-dayor good-till-date may trigger multiple Firm-up Requests over the course of the trading day but only one at a time. Binding Block Orders which are Fill or Kill or Immediate or Cancel can never trigger Firm-up Requests.	Normal SwissAtMid orders (SWM) of block value, with validity good-for-day or good-till-dateas well as normal and Iceberg Orders with routing instruction Plus (SWMB) with validity Day may trigger multiple Firm-up Requests over the course of the trading day but only one at a time. SwissAtMid Normal Orders can never trigger Firm-up Requests if they are either: – Fill or Kill – Immediate or Cancel – Sweep Orders - Sweep (SWMX) - EBBO (SEB).

Participation in Firm-up Phases	Indicative Block Orders are canceled upon the start of a Firm-up Phase. Firm-up has to be done by entering new Firmed-up Block Orders which are "locked" for the duration of the Firm-up Phase.	A Firmed-up Block Order entered as part of a Firm-up Phase is "locked" in the Firm-up Phase. However, a residual Firmedup Block Order may participate in more than one Firm-up Phase over the course of the day if not fully executed or expired in their first Firm-up Phase.	Binding Block Orders with validity good-for-day or good-till-date **may participate in more than one Firm-up Phase** over the course of the day but only one at a time. Binding Block Orders with validity good-for-day or good-till-date **may participate in a Firm-up Phase without being "locked" in the Firm-up Phase.** This means they can at the same time interact with liquidity in the SwissAtMid Order Book. Binding Block Orders with validity Immediate or Cancel or Fill or Kill cannot participate in a Firm-up Phase.	Normal SwissAtMid orders (SWM) of block value, with validity good-for-day or good-till-date as well as well as normal and Iceberg Orders with routing instruction Plus (SWMB) with validity Day, **may trigger multiple Firm-up Requests** over the course of the trading day but only one at the same time. Normal SwissAtMid orders (SWM) of block value, with validity good-for-day or good-till-date as well as well as normal and Iceberg Orders with routing instruction Plus (SWMB) with validity good-for-day, **may participate in a Firm-up Phase** without being "locked" in the Firm-up Phase. This means they can at the same time interact with liquidity in SwissAtMid. SwissAtMid Normal Orders can never participate in Firm-up Phases if they are either: – Immediate or Cancel – Fill or Kill – Sweep Orders (SWMX) – EBBO Orders (SEB).

15.4.3 Match Break

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

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

15.4.4 Pre-trade controls

The Exchange may reject Block Orders in the order book without pre-trade transparency from SwissAtMid if the order size of the incoming Block Order does not reach or falls below the predefined minimum order size of securities compared with normal market size pursuant to Art. 27 para. 4 lit. d FMIO (Minimum Block Order Value Threshold (Large In Scale)). The Exchange shall publish the minimum order size for Block Orders per security together with the static data (see Member Section / Reference Data / Reference Data Interface (RDI) / Tradedinstrument.txt).

To qualify as an Indicative or Binding Block Order in SwissAtMid, the Order Value must be at or above a pre-defined Minimum Block Order Value Threshold.

15.4.5 Matching at the Mid-Point Price

If the remaining portion for Block Orders is smaller than the Minimum Block Order Value, the remaining portion of the Block Order is deleted from the SwissAtMid order book.

In the case of Block Orders, each (partial) execution in SwissAtMid must additionally correspond to the predefined minimum order size compared with normal market size.

15.4.6 Performance Score for indicative Block Orders (SwissAtMid Block Scoring)

Participants using Indicative Block Orders will be scored dynamically based on the quality of their responses to Firm-up requests. The performance score for indicative Block Orders is based on the following criteria during the firm-up phase:

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

Quality of Response

Is set to 100 when the participant responds within the allowed Firm-up interval, otherwise it is set to 0.

Quality of Size

Is based on the ratio between the original indicative Block Order size and the Total Firmed-up size.

Type of Interruption of Firm-up Phase

Traders who amend their indicative Block Orders during the Firm-up Phase in a way that results in a self-inflicted match break (e.g. MEQ constraint) or cancel it once firmed-up also resulting in a match break will receive a poor Order Score. In other words, if the Firmed-up Block order is canceled or amended during the Firm-up Phase in such a way that it can no longer match with the other orders in the Firm-up Phase receive a poor Order Score.

The Exchange determines

- a performance score per participant and security in SwissAtMid; and
- a performance score per participant for all SwissAtMid securities. The participant receives this current performance score in each new firm-up phase.

If one of the predefined performance score thresholds for indicative Block Orders is reached or falls below, the participant is blocked from indicative Block Orders for the remainder of the current trading day. All existing indicative Block Orders from blocked participants are deleted from the order book without pre- Directive 5: Alternative Trading SIX Swiss Exchange AG 15 06/12/2021 trade transparency, and the entry of new indicative Block Orders is rejected. The binding Block Orders are not affected by the blocking of the participant for indicative Block Orders.

In justified exceptional cases and special situations pursuant to Clause 10.10 Trading Rules, the Exchange may, at the participant's request, lift the block for indicative Block Orders.

The thresholds for the performance score of indicative Block Orders relevant to the blocking of participants is determined for each trading segment. The details are laid down in the "Trading Parameters" Guideline.

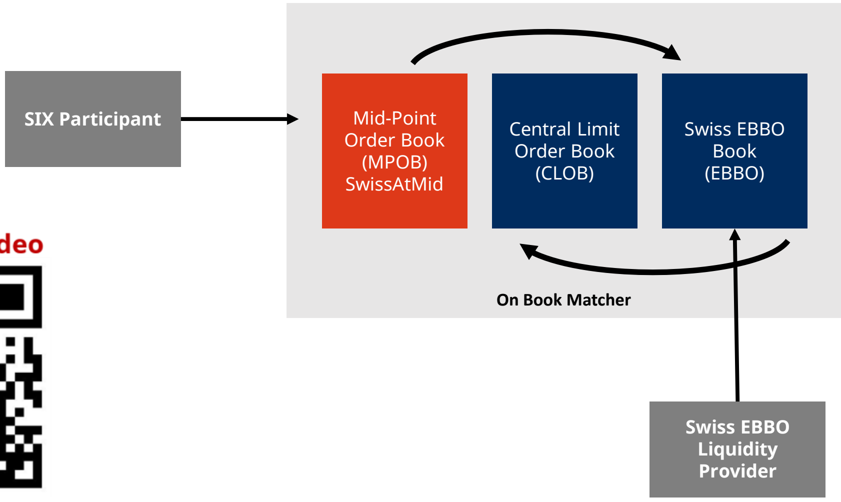
Market control interventions remain reserved in accordance with the "Market Control" Directive.

Remark:

Matching examples can be found in the SWXess Maintenance Release 10 (SMR 10) (link).

15.5 Swiss EBBO

Swiss EBBO is a service offered in addition to the Central Limit Order Book (CLOB) and the trading service without pre-trade transparency Mid-Point Order Book (MPOB) - SwissAtMid. Swiss EBBO offers pricing at the European Best Bid and Offer (EBBO) price on a best effort basis in equities (Blue Chip Shares and Mid-/Small-Cap Shares) listed on the SIX Swiss Exchange AG. The EBBO execution process attempts in one or more iterations to capture as much liquidity as possible in the various order books until the order is executed. If the EBBO order cannot be fully executed, the remaining quantity rests as a passive order in the Central Limit Order Book (CLOB).



Explain it – Video

15.5.1 Tradeable Securities

Securities of the following trading segments may be traded in Swiss EBBO:

a) Blue Chip Shares
b) Mid-/Small-Cap Shares

If the order book for on-exchange, hybrid trading is not activated for a given trading segment, orders with Routing Instruction "SEB" are forwarded directly to the Central Limit Order Book (CLOB), to the Quote Driven Market (QDM) order book or into the order book without pre-trade transparency from SwissAtMid.

However, orders from Swiss EBBO Liquidity Providers will be rejected if submitted in securities that are not supported by the Swiss EBBO trading service.

Iceberg orders are not supported by the Swiss EBBO trading service and therefore Iceberg orders with routing instruction to the Swiss EBBO Order Book will be rejected.

15.5.2 Liquidity Providers

The liquidity providers admitted by the Exchange provide prices on a best effort basis in the Swiss EBBO order book at the European Best Bid and Offer (EBBO) price.

The Exchange has appointed an independent service provider to determine the European Best Bid and Offer (EBBO) price and compares the prices provided by liquidity providers against the calculated

EBBO. The Exchange publishes a list of the trading venues which the independent service provider takes into account when determining the European Best Bid and Offer (EBBO) price.

15.5.3 Hybrid Order Book

The Exchange maintains one or more (e.g. for several currencies per security) hybrid order books for each security . These order books shall classify and manage all orders received from liquidity providers according to price, quantity and the time at which they are received. Orders from participants are not entered in the hybrid order book.

The orders contained in the hybrid order book are binding.

The order prices and volumes contained in the hybrid order book are published.

15.5.4 Order Definition

An order is a binding offer to buy or sell a certain quantity of a security at an unlimited or limited price.

Orders with the Routing Instruction "SEB" may be entered in or deleted from the hybrid order book or during set periods. All incoming orders shall be assigned a time stamp and an identification number

15.5.5 Order Types

The Exchange supports the order type Normal Order for hybrid trading.

A Normal Order may be entered by a participant at any time during the trading day. Non-executed parts of the order with Routing Instruction “SEB” in Swiss EBBO are moved to the Central Limit Order Book (CLOB) until they have been executed or deleted, or have expired. Other validities and routing instructions remain reserved.

A Normal Order may be entered by a liquidity provider in the hybrid order book of Swiss EBBO at any time during the trading day. Non-executed parts of the order remain in the order book until they have been executed or deleted, or have expired. Other validities and routing instructions remain reserved.

15.5.6 Market Model

Orders with Routing Instruction "SEB" from participants are executed at the best price offered on the opposite side. The aim is to execute orders with routing instruction "SEB" from participants at the European Best Bid and Offer price (EBBO) on a best effort basis. Swiss EBBO corresponds to the prices provided by the liquidity provider and may differ from the European Best Bid and Offer (EBBO) price. There is no guarantee of execution at the European Best Bid and Offer (EBBO) price.

In the event of the execution of participants orders with Routing Instruction “SEB” at SIX Swiss Exchange AG not being done at the European Best Bid and Offer (EBBO) price, then these trades are not deemed to be irregular on-exchange trades and will therefore not be cancelled by the Exchange.

15.5.7 Price-Quantity-Time Priority

The price-quantity-time priority principle means that the order from a liquidity provider with the better price (highest price limit for buy orders, lowest price limit for sell orders) shall be executed first. Unlimited orders enjoy top priority when consolidating orders. For orders with the same price, the order with the larger quantity shall be executed first. For orders with the same price and quantity, the order received first shall also be executed first.

If an order of a liquidity provider defining the full execution quantity cannot be executed against the full quantity of an order in Swiss EBBO, this order loses its priority.

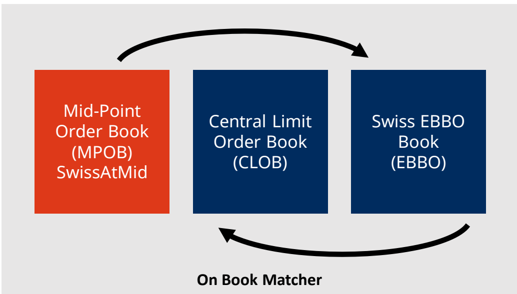
15.5.8 Trades of orders from participants with Routing Instruction “SEB”

Trades are triggered by an incoming order from a participant with Routing Instruction “SEB” which is executed with the orders on the opposite side of the following order books provided quantity and price allow it:

a) Central Limit Order Book (CLOB) and
b) order book without pre-trade transparency (MPOB) – SwissAtMid and
c) hybrid order book Swiss EBBO.

The following rules shall apply:

a) in the case of an incoming order from a participant with Routing Instruction “SEB”, the Exchange determines which order book offers the best price on the opposite side and routes the order to the corresponding order book. If two or all the order books offer the same best price, the following priority applies for the first matching cycle:
    a. order book without pre-trade transparency (MPOB) - SwissAtMid;
    b. Central Limit Order Book (CLOB)
    c. hybrid order book Swiss EBBO.



b) the incoming order from a participant with Routing Instruction “SEB” is executed immediately taking account of the corresponding priority and the execution provisions of the corresponding order book with orders of the opposite side in SwissAtMid, CLOB and Swiss EBBO in one or more steps;
c) if an order with Routing Instruction "SEB" from a participant is only partially executed in the first matching cycle, the Exchange determines the next best price on the opposite side while taking account of the price limit of the order, whereby from the second matching cycle on only the Central Limit Order Book (CLOB) and the hybrid order book Swiss EBBO are taken into account;
d) the partially executed order from a participant with Routing Instruction "SEB" is further executed in one or more steps, taking account of the corresponding priority and the execution provisions of the corresponding order book with orders of the opposite side in CLOB and in Swiss EBBO;
e) the execution of the order from a participant with Routing Instruction "SEB" continues in accordance with c) and d) above in additional matching cycles until no more executions are

possible in consideration of the participant's price limit. Subsequently the remaining portion of the order with Routing Instruction "SEB" from a participant is routed to the Central Limit Order Book. Other order validities remain reserved;

f) if the quantity of the order from a participant with Routing Instruction "SEB" is greater than the quantity of the order from a liquidity provider, and the liquidity provider has defined full execution quantity on his order, execution shall not take place in the hybrid order book Swiss EBBO;

g) if there are no orders from liquidity providers in the hybrid order book Swiss EBBO, the incoming order from a participant with Routing Instruction "SEB" is routed to the Central Limit Order Book (CLOB) or the order book without pre-trade transparency SwissAtMid.

For executions of orders from a participant with Routing Instruction "SEB" in the Central Limit Order Book (CLOB), the execution provisions of continuous trading apply in accordance with the Directive "Trading". For executions of orders from a participant with Routing Instruction "SEB" in the order book without pre-trade transparency SwissAtMid, the execution provisions apply in accordance with Directive "Alternative Trading".

Opposite orders from liquidity providers may never be executed in the hybrid order book Swiss EBBO.

The Exchange does not support Self-Match Prevention for trading in Swiss EBBO

Example 1: Buy 'EBBO Order' 700 shares at 82.58

MPOB (SwissAtMid) :

Price	Ask Volume	Cum. Volume
82.60	-	50
82.58	-	50
82.56	-	50
82.54	50 (1)	50

CLOB [Spread 82.52 to 82.56]:

Price	Ask Volume	Cum. Volume
82.60	1'000	1'800
82.58	600 (4)	800
82.56	200 (2,i)	200
82.54		

Swiss EBBO Book:

Price	Ask Volume	Cum. Volume
82.60	2'000	3'300
82.58	1'000	1'300
82.56	300 (3)	300
82.54		

Result :

1) Trade 50 shares in SwissAtMid at 82.54
2) Trade 200 shares in CLOB at 82.56
3) Trade 300 shares in EBBO at 82.56
4) Trade 150 shares in CLOB at 82.58

Average price with routing: 82.56286
Average price without routing: 82.57429

Comment:

i) If EBBO and CLOB offer the same price, liquidity in the CLOB is preferred.

ii) If EBBO and SwissAtMid offer the same price, liquidity in SwissAtMid is preferred.

Example 2: Buy 'EBBO Order' 700 shares at 82.58

MPOB (SwissAtMid):

Price	Ask Volume	Cum. Volume
82.60	-	50
82.58	-	50
82.56	-	50
82.54	50 (1)	50

CLOB [Spread 82.52 to 82.56]:

Price	Ask Volume	Cum. Volume
82.60	1'000	1'800
82.58	600 (5)	800
82.56	200 (3,i)	200
82.54		

Swiss EBBO Book:

Price	Ask Volume	Cum. Volume
82.60	2'000	3'400
82.58	1'000	1'400
82.56	300 (4)	400
82.54	100 (2)	100

Result:

1) Trade 50 shares in SwissAtMid at 82.54
2) Trade 100 shares in EBBO at 82.54
3) Trade 200 shares in CLOB at 82.56
4) Trade 300 shares in EBBO at 82.56
5) Trade 50 shares in CLOB at 82.58

Average price with routing: 82.55714
Average price without routing: 82.57429

Comment:

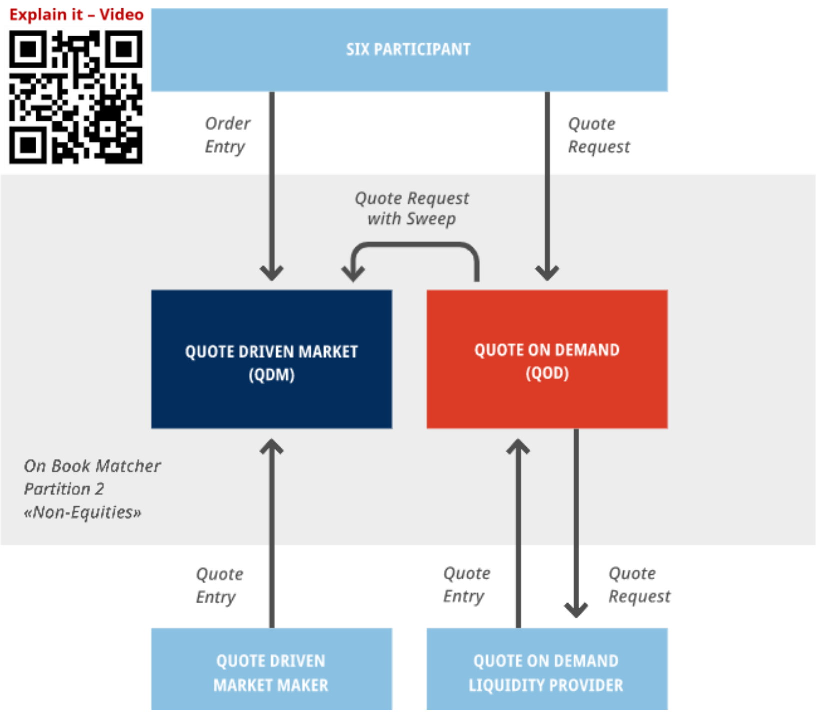
i) If EBBO and CLOB offer the same price, liquidity in the CLOB is preferred.

ii) If EBBO and SwissAtMid offer the same price, liquidity in SwissAtMid is preferred.

15.6 ETF/ETP Quote on Demand (QOD)

In addition to the Quote Driven Market (QDM) market model, the Swiss Stock Exchange offers - for the trading of listed Exchange Traded Funds (ETFs) and Exchange Traded Products (ETPs) - the trading service without pre-trade transparency Quote on Demand (QOD).

How the Quote on Demand service works



Market Makers provide binding quotes into the Quote Driven Market (QDM).

Participants place orders via the QDM.

Or with the Quote on Demand (QOD) trading service, participants have the possibility to place a Quote Request into QOD.

Every new Quote Request starts a call period, in which the Liquidity Providers receive the Quote Request.

Liquidity Providers will be invited to submit "Buy" and "Sell" Quotes with the quantity defined by the participant in the Quote Request.

The Exchange supports the following trading modes for trading with Quote Requests: "Discretion Only", "Auto-Execute or Cancel" and "Auto-Execute and Optional Discretion".

Choosing the Routing Instruction "Quote Request with Sweep", the request also considers the Quote Driven Market (QDM). In this way the participant may access more liquidity.

Figure: Quote on Demand

The Quote on Demand trading service starts a call period for every entered Quote Request and Liquidity Providers can respond with Quotes.

15.6.1 Quote Request and Quotes

As a general rule, the Quote Requests entered by the participants **are not binding** for the duration of the Call Phase. On the other hand Quotes entered by the Liquidity Providers **are binding** for the duration of the Call Phase.

Quote Requests

A quote request can be entered by a participant during pre-opening and continuous trading via Standard Trading Interface (STI) or the OUCH Trading Interface (OTI). Each quote request starts a dedicated call phase. Quote requests can be changed or deleted by participants during the call phase. Quote requests can be rejected by the liquidity provider during the call phase. Partial executions of quote requests are not supported. Non-executed quote requests with the Routing Instruction "QODN" or "QODS" expire at the end of the call phase. Other instructions from the participant remain reserved.

Remark:

Optionally, a time **(effective time)** during the trading day at which the call phase is to start can be selected for the quote request. The exchange manages the quote request until the effective time of the call phase in the exchange system, and it is not visible to participants nor liquidity providers. When the effective time for the call phase is reached, the call phase is started according to the time priority of the entry into the exchange system.

Quotes

Quotes can be entered by Liquidity Providers of Quote on Demand via the Quote Trading Interface (QTI) or the OUCH Trading Interface (OTI) during the Call Phase. Quotes are simultaneously limited buy and sell orders in a single instruction. Quotes remain in the Call Phase until executed, amended, deleted or expired. Only one pair of buy and sell orders is allowed per Call Phase and per Liquidity Provider.

Explain it – Video

QOD User Interface (QOD UI)

SIX provides a web-based Quote on Demand User Interface (QOD UI) to participants interested in using the new Quote on Demand trading service. The QOD UI supports all functionalities required for submitting, maintaining and deleting Quote Requests as well as trading in the non-displayed trading service Quote on Demand. The QOD UI will not support functionalities for Quotes from Liquidity Providers. The QOD trading service can be accessed via STI, QOD UI or in a hybrid mode where Quote Requests are initiated via STI and responses can be managed in the QOD UI. The QOD User Interface manual can be found in the member section.

15.6.2 QOD Trading Modes

The participant can choose to execute his Quote Request in different Trading Modes:

- Discretion Only

- Auto-Execute or Cancel

- Auto-Execute and Optional Discretion

The Trading Mode of a Quote Request **cannot be modified** when the Call Phase is running.

Discretion Only

Description	This Trading Mode does not support auto-execution. Participants **have full control and discretion** if and when an execution takes place. If multiple Quotes are in-limit and the participant chooses to trade, the execution will take place against the in-limit Quote with the best price-time priority. Discretionary selection of a Quote to be executed against is not supported.
Condition for Matching	• The entire volume of Quote Request can be executed • The participant confirms the execution of their Quote Request
Duration	5 minutes
Minimum Number of Responders	Not applicable

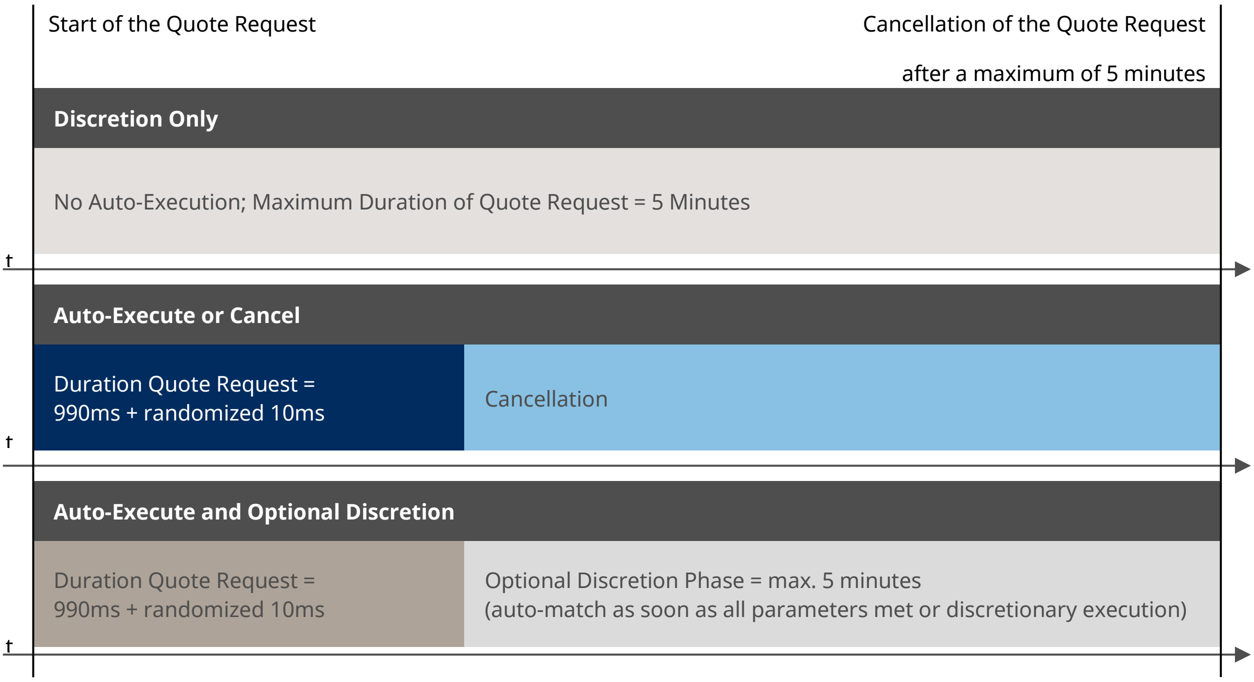
Auto Execute or Cancel

Description	This Trading Mode is fully automated and will lead to the execution of the Quote Request if the conditions for matching are met. If no trade can be executed the Quote Request is automatically deleted after the Call Phase.
Condition for Matching	• The entire volume of the Quote Request can be executed • The minimum number of responding liquidity providers is met • At least one Quote is in-limit
Duration	Default: 990 milliseconds Plus a maximum of 10 milliseconds “Random Matching Time” OR Custom duration between 1 - 99999 milliseconds plus a maximum of 10 milliseconds “Random Matching Time”
Minimum Number of Responders	Default value is set to 1 by SIX. Minimum Number of Responding Liquidity Providers can be overwritten by the participant for each Quote Request.

Auto Execute and Optional Discretion

Description	This trading mode is a mix of the “Discretion Only” and “Auto Execute or Cancel” modes. In the initial Auto-Execute phase an automated execution of the Quote Request is attempted. If no trade is made during the Auto-Execute phase, the Call Phase is extended by an Optional Discretion Phase. If and as soon as the conditions for matching are met during the Optional Discretion Phase, the Quote Request is immediately executed without further intervention of the participant.
Condition for Matching	During the entire Call Phase: • At least one of the Quotes is in-limit • The minimum number of responding liquidity providers is met During the Optional Discretion part of the Call Phase: • The participant submitting the Quote Request chooses to trade
Duration	Default: 990 milliseconds Plus a maximum of 10 milliseconds “Random Matching Time” OR Custom duration between 1 - 99999 milliseconds plus a maximum of 10 milliseconds “Random Matching Time”
Minimum Number of Responders	Default value is set to 1 by SIX. Minimum Number of Responding Liquidity Providers can be overwritten by the participant for each Quote Request.

15.6.3 Overview Duration



15.6.4 Market Model of the trading service Quote on Demand (QOD) and Matching Rules

In the Quote on Demand trading service, a Call Phase is triggered for each submitted Quote Request during Continuous Trading. At the start of the Call Phase, all registered Liquidity Providers will be invited to submit Quotes with the quantity defined by the participant in the Quote Request. Depending on the Trading Mode and the Routing Instruction defined in the Quote Request, SIX will execute the Quote Request against in-limit Quotes from Liquidity Providers according to the price-full quantity-time priority principle in Quote on Demand (QOD) and/or the Quote Driven Market (QDM) of the corresponding security at SIX.

Each Quote Request will be assigned a unique Auction ID. Multiple simultaneous Call Phases per security and participant are supported. The number of concurrent Call Phases is not limited per security or participant.

– **Quote Driven Market (QDM)** with pre-trade transparency and price-time priority

– **Quote on Demand (QOD)** without pre-trade transparency and price-full quantity-time priority

15.6.5 Sweep / Non Sweep Quote Requests

Routing Instruction QODS – Quote Request with Sweep:

At the time of execution, a Quote Request with Sweep **will look at the consolidated** order book (QDM and QOD).

A Quote Request with Sweep is executed in full quantity against

- the best in-limit Quote with the highest price/time priority in Quote on Demand and/or
- orders and quotes which are equal or better than the best in-limit Quote at the time of execution in the Quote Driven Market.

For executions of Quote Requests in the Quote Driven Market the execution provisions of continuous trading apply in accordance with Directive 3: “Trading” / Clause 8.

If the best in-limit price offered is equal in the Quote Driven Market and in Quote on Demand then the book with the better time priority is considered first.

Partial executions are not supported for quote requests.

For quote requests with the Routing Instruction “QODS”, trades in the Quote Driven Market (QDM) may also occur if no quote is “in limit” in the Quote on Demand order book (QOD) but an execution of the entire quantity in the Quote Driven Market (QDM) is possible “in limit”.

Example

Quote Request with Routing Instruction "Sweep"	
Side	Sell
Quantity	3'000
Limit Price	448.25

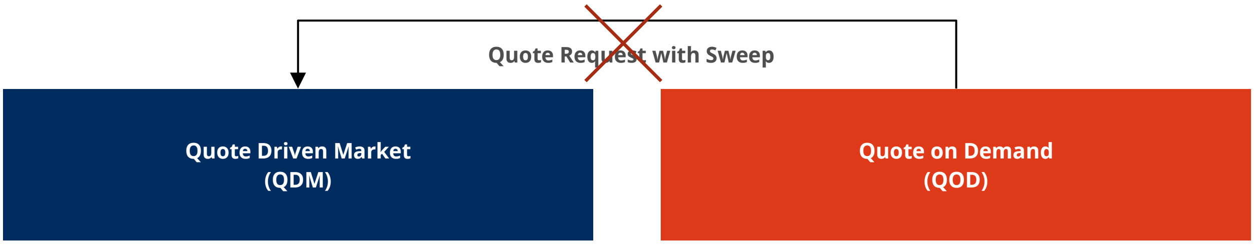
QDM		QOD	
Bid Price	**Bid Vol**	**Bid Price**	**Bid Vol**
448.34	200	448.3240	3'000
448.32	500	448.3120	3'000
448.31	700	448.3110	3'000
448.30	1'000	448.3095	3'000
448.28	2'000	448.3092	3'000

Matching Example	
Bid Price	Bid Vol
448.34	200
448.3240	3'000

Execution Price for Quote Request with Routing Instruction "Sweep"
200@448.34
2'800@448.324
448.3251 (200@448.34 + 2'800@448.324)

Routing Instruction QODN – Quote Request non Sweep:

At the time of execution Quote Requests non Sweep will only look at Quotes in the Quote on Demand (QOD) order book (without pre-trade transparency).



A Quote Request non Sweep is executed in full quantity against the best in-limit Quote with the highest price-time priority in Quote on Demand.

Example

Quote Request with Routing Instruction "Non Sweep"	
Side	Sell
Quantity	3'000
Limit Price	448.25

QDM		QOD	
Bid Price	**Bid Vol**	**Bid Price**	**Bid Vol**
448.34	200	448.3240	3'000
448.32	500	448.3120	3'000
448.31	700	448.3110	3'000
448.30	1'000	448.3095	3'000
448.28	2'000	448.3092	3'000

Matching Example	
Bid Price	Bid Vol
448.3240	3'000

Execution Price for Quote Request with Routing Instrunction "Non Sweep"
448.3240 (3'000@448.324)

15.6.6 Termination of the Call Phase

A Call Phase will be terminated if

- the Quote Request is deleted by the participant
- the Quote Request is executed
- the Call Phase has expired

15.6.7 Trading Day and Hours

Trading days are governed by the trading days of the Exchange and are stated in the Exchange trading calendar.

Trading hours are governed by the trading hours of the Primary Reference Market. The Primary Reference Market is defined as the primary exchange on which ETFs and ETPs are listed or admitted to trading on a regulated market. Trading is available during the trading period "Continuous Trading" on the Primary Reference Market relating to the securities in question.

If a quote request with the Routing Instruction “QODN” or “QODS” is entered during pre-opening or a trading interruption, the quote request is queued until continuous trading resumes. Existing quote requests are deleted in the closing auction and rejected during post-trading.

15.6.8 Quote Deviation Limit

The Exchange can reject Quote Requests in the Quote on Demand order book (QOD) and thus not start a Call Phase if the price limit of the incoming Quote Request reaches or exceeds the predetermined price deviation of the security compared to the current price in the Quote Driven Market (QDM).

15.6.9 Pre-Trade Transparency

All Quote Requests and Quotes which are executed using an order management facility of the Exchange are exempted from pre-trade transparency regulations according to Art. 27 para. 4 let. c FMIO. The Quote Requests and Quotes are not published via the SWXess public market information channels during the Call Phase.

Liquidity Providers do not see the Quotes submitted by other Liquidity Providers during the Call Phase.

SIX will disclose the following information about Quote Requests to the Liquidity Providers invited to the Call Phase:

- Unique identification of the security: ISIN, trading currency and trading venue
- Size of the Quote Request
- Specification whether the Quote Request is with Sweep or non-Sweep

The participant identification (Party ID) of the participant for quote requests is disclosed to the liquidity providers. The designation of the transaction type (buy/sell) of the quote requests is **not disclosed** to the liquidity providers.

With QOD CHF-Bonds the designation of the transaction type (buy/sell) of the quote requests is **disclosed** to the liquidity providers.

15.7 ETF/ETP Quote on Demand (QOD) Europe

As already covered in section 15.6, all ETF/ETP listed on SIX Swiss Exchange (tradable in the Quote Driven Market) are available for trading in the Quote on Demand trading service.

ETF/ETP QOD Europe allows trading in ETFs and ETPs that are listed on one of the below European exchanges and have a cross listing at SIX Swiss Exchange:

– London Stock Exchange (XLON)

– Euronext Amsterdam (XAMS)

– Euronext Brussels (XBRU)

– Euronext Paris (XPAR)

– Deutsche Börse XETRA (XETR)

– Borsa Italiana (XMIL, ETFP, MTAA)

– Wiener Börse AG (XWBO)

– Nasdaq Stockholm AB (XSTO)

All trades in QOD Europe are CCP cleared and settle into the CSD as defined by the reference exchange.

Admission to trading of ETF or ETP in ETF/ETP QOD Europe is exclusively reserved for ETF and ETP whose ISIN is already listed on SIX Swiss Exchange in at least one trading currency. This ensures in particular that for all ETF to be admitted, an approval or authorization from FINMA in accordance with Art. 13f or Art. 120 of the Federal Act on Collective Investment Schemes (CISA) is available.

In addition to the two requirements mentioned above, the admission of ETF/ETP is limited to currencies that can be technically settled by SIX Swiss Exchange.

Important Note:

For ETF/ETP QOD Europe, the Routing Instruction “QODS” (Quote on Demand with Sweep) is not supported for QOD requests. QODS orders will not be rejected but will be treated as QODN orders and therefore routed to the QOD order book. They can execute only in the QOD order book.

15.8 CHF-Bonds Quote on Demand (QOD)

Quote on Demand for CHF Bonds is a service for on-exchange trading with quote requests for listed bonds denominated in Swiss francs (CHF bonds) without pre-trade transparency.

For trading in QOD CHF-Bonds, the explanations in the section "ETF / ETP Quote on Demand (QOD)" apply, unless different rules are expressly provided for QOD CHF-Bonds.

CHF-Bonds Quote on Demand (QOD)	
Trading Interfaces	Standard Trading Interface (STI) for QOD Requests Quote Trading Interface (QTI) for QOD Quotes OUCH Trading Interface (OTI) for QOD Requests and QOD Quotes
Market Data Interfaces	SIX MDDX Multi-Dimensional Data fluX® Interface (SIX MDDX) ITCH Market Data Interface (IMI)
Trading Segments	Bonds – CHF Bonds – CHF Swiss Confederation Bonds – CHF Swiss Pfandbriefe
Trading Period	Continuous Trading
Trading Modes	Discretion only Auto-Execute or Cancel Auto-Execute and optional Discretion
Market Model	Quote on Demand (QOD)
Order Types	QOD Request (STI and OTI) QOD Quote (QTI and OTI)

15.8.1 Liquidity providers

The liquidity providers admitted by the Exchange provide quotes in the order book for QOD CHF-Bonds at the request of a participant.

Participants can define a liquidity provider that must participate at each call phase. Trades in QOD CHF-Bonds with a defined mandatory liquidity provider can only be triggered if the defined mandatory liquidity provider provides a quote during the call phase or rejects the request.

As for CHF-Bonds the side of the QOD Request is always disclosed to the QOD liquidity providers, SIX Swiss Exchange allows QOD liquidity providers to respond to all QOD Requests with a single-sided quote via QTI and OTI. Both single- and double-sided quotes will be accepted, if they match the quantity specified in the QOD Request.

15.8.2 Specification of quote request

QOD CHF-Bonds are only supported with the Routing Instruction “QODN” (quote request no sweep), as follows:

“QODN” (quote request no sweep) for entry in the Quote on Demand order book (QOD) and possible execution in the Quote on Demand order book (QOD) only; the Routing Instruction “QODN” is supported for quote requests with or without price limit. If the order book for on-exchange trading with quote requests is not activated for a given trading segment, quote requests with Routing Instruction “QODN” will be rejected. If a quote request with the Routing Instruction “QODN” is entered during pre-opening or a trading interruption, the quote request is queued until continuous trading resumes. Existing quote requests with the Routing Instruction “QODN” are rejected during post-trading. Orders with Routing Instruction “QODN” follow the execution provisions of the Quote on Demand order book.

Important: If a quote request with "QODS" (quote request with sweep) is entered in QOD CHF-Bonds, this quote request is not rejected, but will be handled as Routing Instruction "QODN".

15.8.3 Trades of quote requests

Trades in QOD CHF-Bonds are triggered by an incoming quote request from a participant which is executed during the call phase only with quotes on the opposite side of the Quote on Demand (QOD) order book provided that quantity and price allow it.

Trades in QOD CHF-Bonds with a defined mandatory liquidity provider can only be triggered if the defined mandatory liquidity provider places a quote during the call phase or rejects the request

16 Market Control

Directive 4: Market Control

The Market Control unit of the Exchange actively monitors trading in real-time to ensure that trading is conducted fairly and properly.

The Exchange can interrupt trading, delete orders from the order book and invalidate and cancel trades or require the participants involved to reverse them.

The Exchange may carry out such trading interventions as it deems necessary, in particular

a. delay the opening of trading in a security;
b. restrict or suspend continuous trading in a security;
c. instruct the participants involved to adjust or delete orders;
d. reject orders or delete them in the name of the participants involved;
e. declare trades null and void and cancel them according to Clause 6;
f. adjust trading parameters at short notice; or
g. suspend trading in a given security or on the market as a whole.

Further information is set out in Directive 4 "Market Control".

Sample question:

SIX Swiss Exchange Market Control is the body responsible for calculating and making decisions regarding mistrades.

Answer:

a) True
b) False

Answer: a)

Reasons: Market Control has decision-making authority with regard to mistrades.

16.1 Mistrades

Directive 4: Market Control

Market Control may declare an on-exchange, on-order-book trade to be invalid or refuse to accept a report for an off-order-book trade as a "trade on the Exchange" if:

- the price for the trade deviates considerably from the market price, or
- orderly and fair market conditions are not ensured

Any investigation undertaken in relation to mistrades will be initiated either by SIX Swiss Exchange itself or at the request of one of the participants involved. Trades at market prices resulting from wrongful order submissions will not be declared invalid.

Market Control will generally make a decision on the invalidity of a trade within 30 minutes of its execution, with the exception of:

a) bonds: up to 30 minutes after close of trading;
b) Structured Products: up to 30 minutes after close of trading, if at least one of the participants involved has designated the order as a client transaction

Deadlines and Special Rules:

Product	Capacity	Deadline
Shares	Client transaction and own transaction	Claims must be lodged no later than 30 minutes after matching.
Derivative Products (Structured Products)	At least one party designates its order as a client transaction	Claims must be lodged the same day, up to 30 minutes after close of trading.
	Neither party designates its order as a client transaction (own transactions)	Claims must be lodged no later than 30 minutes after matching.
Bonds	Client transaction and own transaction	Claims must be lodged the same day, up to 30 minutes after close of trading.
All other Securities (including Funds and ETFs)	Client transaction and own transaction	Claims must be lodged no later than 30 minutes after matching.

Where the above deadlines have not been met, any late claims will generally be refused. SIX Swiss Exchange may extend the deadline for lodging a claim in exceptional and duly substantiated cases.

In exceptional circumstances, Market Control may extend these deadlines, subject to prior notice via Newsboard.

Please note:

The Market Control unit of SIX Swiss Exchange actively monitors trading. Thus a mistrade need not necessarily be reported by a market participant for a transaction to be declared a mistrade by Market Control.

17 Reporting and Publication Requirements

17.1 Reporting Duty

Further information:

FMIA Art. 31

FMIA Art. 34

FMIA Art. 39

FMIO Art. 37

FinIA Art. 15

FinIO Art. 31

FMIO-FINMA Art. 2-5

FINMA Circular 2018/2

Reporting Office Rules

Definition of "those subject to the duty to report"
Participants admitted to an exchange and other Swiss and international securities firms are hereinafter referred to as "those subject to the duty to report".

Those subject to the duty to report must submit the reports required for transparency in securities trading pursuant to Article 39 of the Federal Financial Market Infrastructure Act (FMIA), Article 37 of the Financial Market Infrastructure Ordinance (FMIO), Article 51 of the Financial Institutions Act(FinIA), Article 75 of the Financial Institutions Ordinance (FinIO), Articles 2-5 of the FINMA Financial Market Infrastructure Ordinance (FMIO-FINMA) and the FINMA Circular 2018/2 "Duty to report securities transactions".

The FINMA Circular 2018/2 explains the duty to report under Article 39 FMIA and Article 37 of the Financial Market Infrastructure Ordinance, Article 51 FinIA and Article 75 FinIO as well as Articles 2-5 of the FINMA Financial Market Infrastructure Ordinance. The FINMA Circular 2018/2 contains in particular explanations on the essential terms, the principles of the reporting obligation, reportable financial transactions, exceptions to the reporting obligation and the determination of the beneficial owner. Comments providing further detail on FINMA Circular 2018/2 and other legal foundations are made in Annex A to the Reporting Office Rules.

Further regulations relevant to the fulfillment of the reporting obligation can be found in the:

- Reporting Office Rules of the SIX Swiss Exchange AG, **applying to all FINMA regulated securities firms and participants of a trading venue**, and
- SIX Swiss Exchange Trading Rules (including Directive 3: Trading), **applying to all SIX Swiss Exchange Participants.**

The SIX Swiss Exchange reporting office ("Reporting Office") receives reports, processes them, and charges fees for doing so.

Please note:

The remaining domestic and foreign securities firms subject to reporting, which are not exchange participants, are referred to as 'Reporting Members'.

17.2 Definitions

Term	Definition
Closing	The combination of a buy and sell order in the same security (creating a legal obligation).
Transmission of order	Transaction flow from order generation to execution.
Delivery Report	Function for transferring commissions and settlement instructions in connection with a direct order.
Legal transaction	A transaction in securities or a transmission of order.
Trade report	Report of a transaction outside the order book that is published to ensure post-trade transparency.
Transaction Report	• In addition to trading on a Swiss Six Exchange or to the Trade Report, those subject to the duty to report must submit a Transaction Report to the Reporting Office • Transmitted transaction with no impact on pricing • Trades in reportable securities at a FINMA-recognised foreign stock exchange or MTF (Multilateral Trading Facility)
One-sided trade report	Trade Report from a party subject to the duty to report relating to a transaction with a party not subject to the duty to report
Two-sided trade report	Trade Report from a party subject to the duty to report relating to a transaction with another a party subject to the duty to report
Remote Member	Foreign exchange participants in a Swiss Six Exchange

17.3 Reportable Transactions

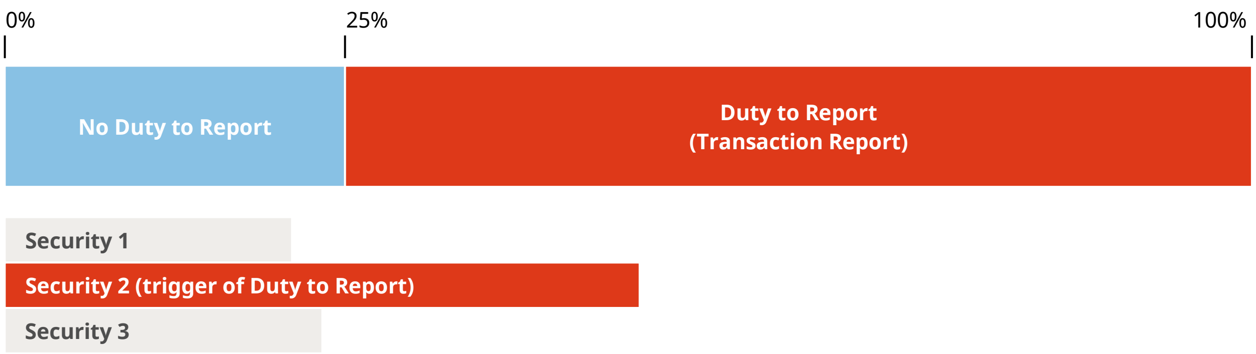
FINMA Circular 2018/2

A distinction should be drawn between securities and derivatives:

Definition Securities
Securities under Article 2 let. b FMIA in conjunction with Article 2 para. 1 FMIO that are admitted to trading on a trading venue in Switzerland. This definition also includes standardised derivatives suitable for mass trading such as exchange-traded derivatives (ETDs), warrants and structured products, including exchange-traded products (ETPs, a cover-all term for collateralised exchange-traded commodities (ETCs) and exchange-traded notes (ETNs)).

Definition Derivatives
Derivatives under Article 2 let. c FMIA financial contracts whose value depends on one or several underlying assets and which are not cash transactions.

The duty to report covers all those subject to the duty to report in securities as defined above (Margin no. 9 of the FINMA Circular 2018/2 "Duty to report securities transactions") as well as all transactions in derivatives where at least one reportable underlying has a weighting of more than 25% and is a security as defined in Margin no. 9. If this 25% threshold is exceeded by the sum of several reportable underlyings but not by one single reportable underlying, the duty to report does not apply.



Where changes to the composition of the underlyings through discretionary decisions during the term of a derivative are excluded (passive management), the status at the time the derivative was created (i.e. whether or not the threshold was exceeded) applies to all transactions in that derivative.

Those subjects to the duty to report are additionally entitled to report transactions in derivatives that are not subject to any duty to report under FINMA Circular 2018/2.

Transactions must be reported in Swiss francs, irrespective of whether the price is quoted in Swiss francs or a foreign currency. Prices must be converted into Swiss francs at a recognised reference exchange rate or the exchange rate prevailing on a liquid currency trading platform at the time of the transaction.

The duty to report covers both the subject to the duty to report own-account transactions and their transactions for clients (see Art. 37 para. 3 FMIO and Art. 75 para. 3 FinIO). Definitions of own-account and client trading can be found in Clause 11.1.3 in the Trading Rules.

17.4 Order Forwarding and Internal Orders

FINMA Circular 2018/2

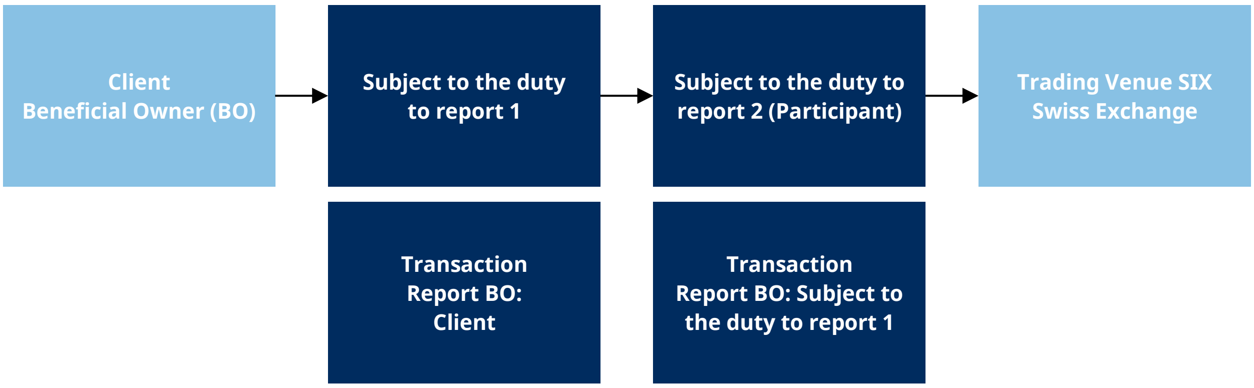
17.4.1 Order Forwarding

Each individual transaction by a subject to the duty to report in the transaction chain, from order generation to forwarding and execution (e.g. client → subject to the duty to report 1 → subject to the duty to report2 → trading venue / execution outside trading venue) must be reported. Where orders are forwarded, the first subject to the duty to report with which a client holds an account or custody account must report the required information on the beneficial owner (or submit a full report in the European Union format).

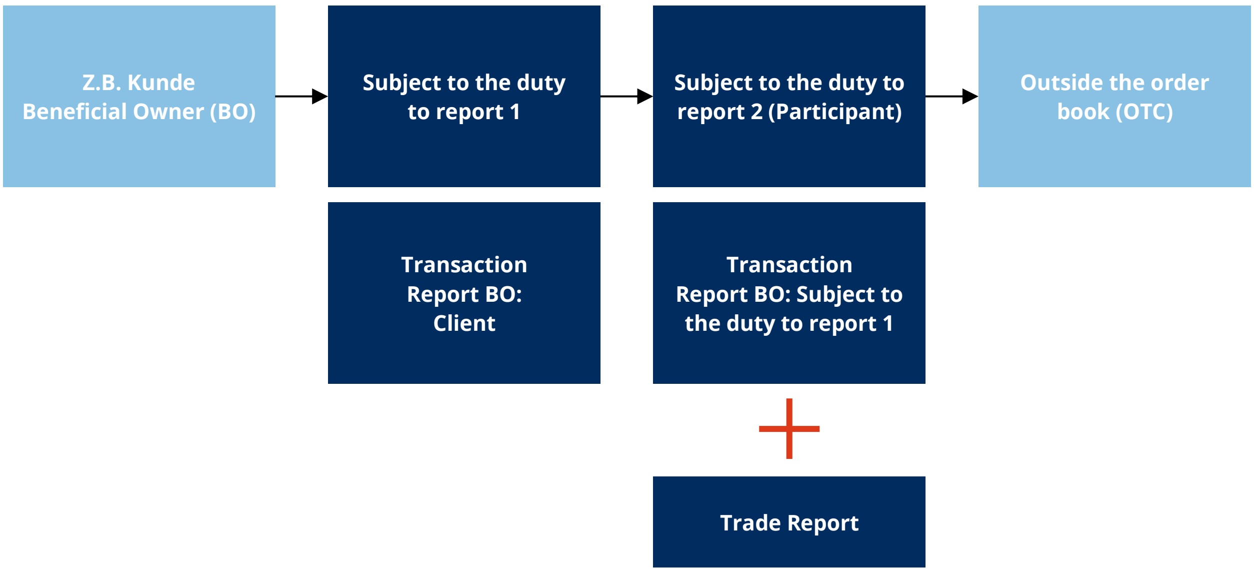
The further subjects to the duty to report in a transaction chain report the subject to the duty to report that forwarded the order in place of the beneficial owner. Where orders are forwarded, each subject to the duty to report in the transaction chain must additionally report the unique transaction identification code (trade ID) provided by the trading venue. If there is more than one trade ID due to partial execution, all trade IDs must be reported. The subjects to the duty to report are also entitled to entrust a single subject to the duty to report or a suitable third party with the task of submitting an individual report or a full report on the entire transaction chain (Art. 37 para. 5 FMIO).

Example: Order Forwarding

On Exchange – On Order Book



On Exchange – Off Order Book/Off Exchange



17.4.2 Internal Orders

Client orders executed internally must also be reported. Collective orders must be reported both when executed via a trading venue and when definitively allocated to clients. A direct placement to the client without booking to the nostro account requires only one report. The report on interal client allocations must be submitted before the close of trading on the following trading day at the latest. If a single report is submitted in consolidated form for several partial executions, this report may show the average price.

Sample question:

Transactions along the transaction chain…

Answer:

a) must be reported by each party subject to the duty to report along the transaction chain

b) must be reported only by the last party subject to the duty to report along the transaction chain

c) are an exception and do not need to be reported

Answer: a)

Explanation: Each individual transaction by a party subject to the duty to report along the transaction chain, from the generation of the transaction through forwarding to execution (e.g. customer → participant party subject to the duty to report 1 → participant party subject to the duty to report 2 → exchange / execution outside of exchange) must be reported.

17.5 Exemptions from the Duty to Report

FINMA Circular 2018/2

17.5.1 Derivation of Swiss and Foreign Securities

Swiss securities
Securities issued by a company with its registered office in Switzerland or listed in Switzerland.

Foreign securities
Securities issued by a company with its registered office outside Switzerland and not primary listed in Switzerland.

Primary listing
If a company is not yet listed on any other exchange when it applies for a listing on a Swiss exchange, its only option is a primary listing.

Secondary listing
Listing of securities in a country other than the one where the company first had its shares listed.

The following possibilities therefore exist:

Issuing company with registered office in Switzerland	Primary listing in Switzerland	Secondary listing on a trading venue in Switzerland	Classification
Yes	No	No	Swiss securities
Yes	No	Yes	Swiss securities
Yes	Yes	Yes	Swiss securities
No	Yes	No	Swiss securities
No	No	Yes	Foreign securities
No	No	No	Foreign securities

Transactions in securities and in derivatives with securities as their underlyings that are executed outside Switzerland do not have to be reported, subject to the conditions outlined below.

17.5.2 Transactions executed outside Switzerland in Swiss Securities and their Derivatives

Those subject to the duty to report under Article 34 para. 2 let. c FMIA (foreign parties subject to the duty to report) and foreign branches of Swiss securities firms are not required to report transactions executed outside Switzerland in Swiss securities and in derivatives with Swiss securities as their underlyings, provided that they fulfil the duty to report in the country in question and that the conditions specified in Article 37 para. 4 let. a FMIO or Article 75 para. 4 let. a FinIO are met.

Where there is no agreement to exchange information under Article 37 para. 4 let. a FMIO or Article 75 para. 4 let. a FinIO, foreign parties subject to the duty to report may also report transactions executed outside the trading venue and outside Switzerland in Swiss securities and in derivatives with Swiss securities as their underlyings to a foreign disclosure office recognized by the trading venue.

Background knowledge: Article 37 para. 4 let. a FMIO or Article 75 para. 4 let. a FinIA**:**

4 The following transactions executed abroad do not have to be reported:

a) transactions in securities admitted to trading on a trading venue in Switzerland and in derivatives with such securities as their underlying instruments, provided the information in question is regularly communicated to the trading venue on the basis of an agreement in accordance with Article 32 paragraph 3 FMIA or within the framework of **an exchange of information between FINMA and the competent foreign supervisory authority** if:

1. they were executed by the branch of a Swiss securities firms or by a
2. the branch or the foreign participant is authorised to trade by the relevant foreign supervisory authority and is obliged to submit a report in the corresponding state or in its state of domicile;

17.5.3 Transactions executed outside Switzerland in Foreign Securities and their Derivatives

Those subjects to the duty to report and foreign branches of Swiss securities firms are exempt from the duty to report transactions in foreign securities and in derivatives with foreign securities as their underlyings in Switzerland if such transactions are executed via a recognised foreign trading venue or a recognised foreign organised trading facility (OTF) (see Art. 37 para. 4 let. b FMIO and Art. 75 para. 4 let. b FinIO).

Transactions executed between a foreign party subject to the duty to report and a foreign counterparty outside a trading venue and outside Switzerland in foreign securities and in derivatives with foreign securities as their underlyings are additionally not covered by the duty to report in Switzerland. Foreign parties subject to the duty to report may also report other transactions executed outside a trading venue and outside Switzerland in foreign securities and in derivatives with foreign securities as their underlyings to a foreign disclosure office recognized by the trading venue.

Reporting Office Rules

17.6 Further Information on Exemptions from the Duty to Report

Trades in securities which are admitted to SIX Swiss Exchange in the "Bonds – Non-CHF" trading segment (international bonds) which are not listed yet are exempted from the duty to report.

Also exempted from the duty to report are Transmissions of Orders concerning foreign securities that are admitted to trading at a trading venue in Switzerland, providing the resulting execution has been effected at a FINMA recognised foreign trading venue, or via a recognised foreign organised trading facility (OTF, Organised Trading Facility / Systematic Internaliser) (clarifying information in respect of FINMA Circular 2018/2, margin number 24 and art. 37 para. 4 let. b FinMIO and art. 75 para. 4 let. b FinIO).

Remote members are also exempted from the duty to report (clarifying information in respect of FINMA Circular 2018/2, margin number 25, 1st sentence):

- In the case of trades in non-Swiss securities and their derivatives outside of Switzerland between two remote members of a Swiss trading venue

  - outside of a trading venue; or
  - at a trading venue not recognised by FINMA; or
  - via an Organised Trading Facility/Systematic Internaliser (OTF, Organised Trading Facility / Systematic Internaliser);

- In the case of trades in non-Swiss securities and their derivatives outside of Switzerland between a remote member of a Swiss trading venue and a Swiss counterparty subject to reporting requirements (the Swiss counterparty remains subject to the duty to report)

  - at a trading venue not recognised by FINMA; or
  - via an Organised Trading Facility/Systematic Internaliser (OTFS, Organised Trading Facility / Systematic Internaliser).

17.7 Foreign Participants of a Swiss Exchange

The reporting obligations listed above are generally also applicable to foreign participants (remote members) on a Swiss stock exchange authorized under Article 40 of the Federal Financial Market

Infrastructure Act (FMIA). Remote members, as an additional option for reporting to the SIX Swiss Exchange Reporting Office, may:

Submit to a foreign Approved Publication Arrangement (APA) recognized by SIX Swiss Exchange any Trade Reports relating to transactions abroad in securities which are admitted for trading on a Swiss exchange.

> **Please note:**
> In the event of any uncertainties regarding the reporting obligation, the trader or reporting agent should contact their responsible Compliance department.

17.8 Overview of the Main Scenarios

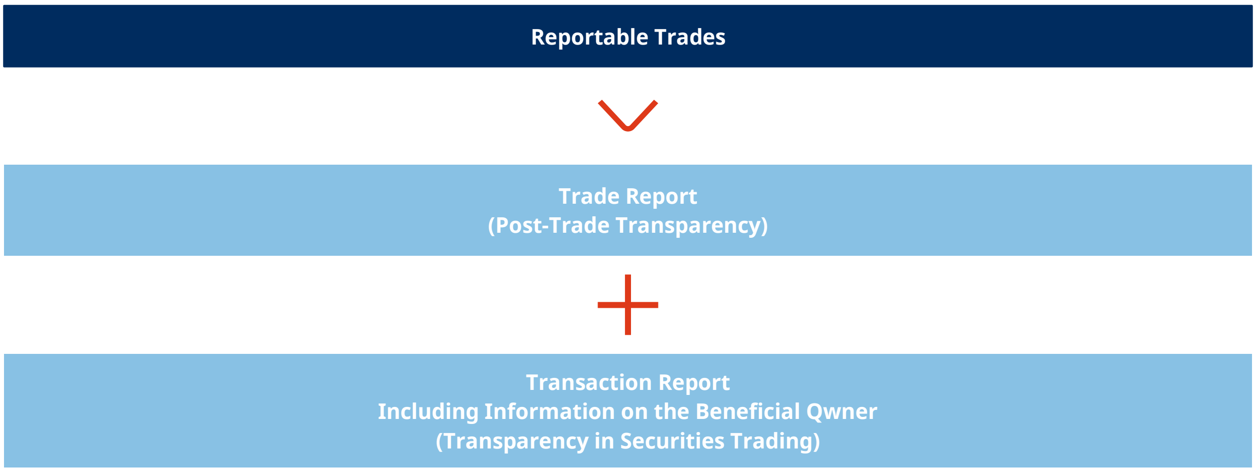
The Annex of FINMA Circular 2018/2 "Duty to report securities transactions" contains an overview of the main scenarios. Please make yourself familiar with these.

Link https://www.finma.ch/en/~/media/finma/dokumente/dokumentencenter/myfinma/rundschreiben/finma-rs-2018-02.pdf?la=de

17.9 Acceptance of Messages

Reporting Office Rules

The following section contains information on the **Trade Report and Transaction Report**. Trade Reports ensure post-trade transparency. Transaction Reports provide transparency in securities trading, also for investigating bodies.



17.9.1 Trade Report

Participants admitted to SIX Swiss Exchange must submit Trade Reports as follows:

- On-exchange, off-order-book trades in accordance with the SIX Swiss Exchange Trading Rules (only for exchange participants), or
- Trades outside of SIX Swiss Exchange ("off-exchange trades") in accordance with the Reporting Office Rules (all subjects to the duty to report).

Reportable off-exchange trades on SIX Swiss Exchange in securities admitted to trading at a Swiss trading venue must be reported to the Reporting Office using a Trade Report. The following two paragraphs remain reserved.

Trade Reports are not required to be submitted to the Reporting Office for reportable trades in securities admitted to trading at a Swiss trading venue at foreign trading venues or foreign Organised Trading Facility (OTF) if the trade has already been reported to the competent foreign authority in the form of a Trade Report and published by that authority.

Foreign branches of Swiss securities firms may fulfil their obligation to submit Trade Reports for trades executed abroad via a foreign reporting office recognised by SIX Swiss Exchange.

Information from the Trade Report will be published to fulfil SIX Swiss Exchange post-trade transparency requirements.

17.9.2 Transaction Report

For reportable trades in Swiss securities admitted for trading at a Swiss trading venue, a Transaction Report must be submitted to the Reporting Office. Furthermore, this shall also apply to trades in foreign securities admitted for trading at a Swiss trading venue,

– provided the trade is conducted at a Swiss trading venue or
– outside a foreign trading venue recognised by FINMA.2

Preceding paragraph also applies to reportable trades in securities derived from securities admitted for trading at a Swiss trading venue.

Every Transmission of Orders for securities admitted to trading at a Swiss trading venue or for securities derived from securities admitted for trading at a Swiss trading venue which ultimately results in a trade must be reported as a Transaction Report to the Reporting Office by every party in the transaction chain which is subject to the duty to report.

The Transaction Report serves to fulfil regulatory requirements and is not published.

Please note:

A list of the foreign exchanges and MTFs recognised by FINMA is available on the FINMA website. http://www.finma.ch

Background information:

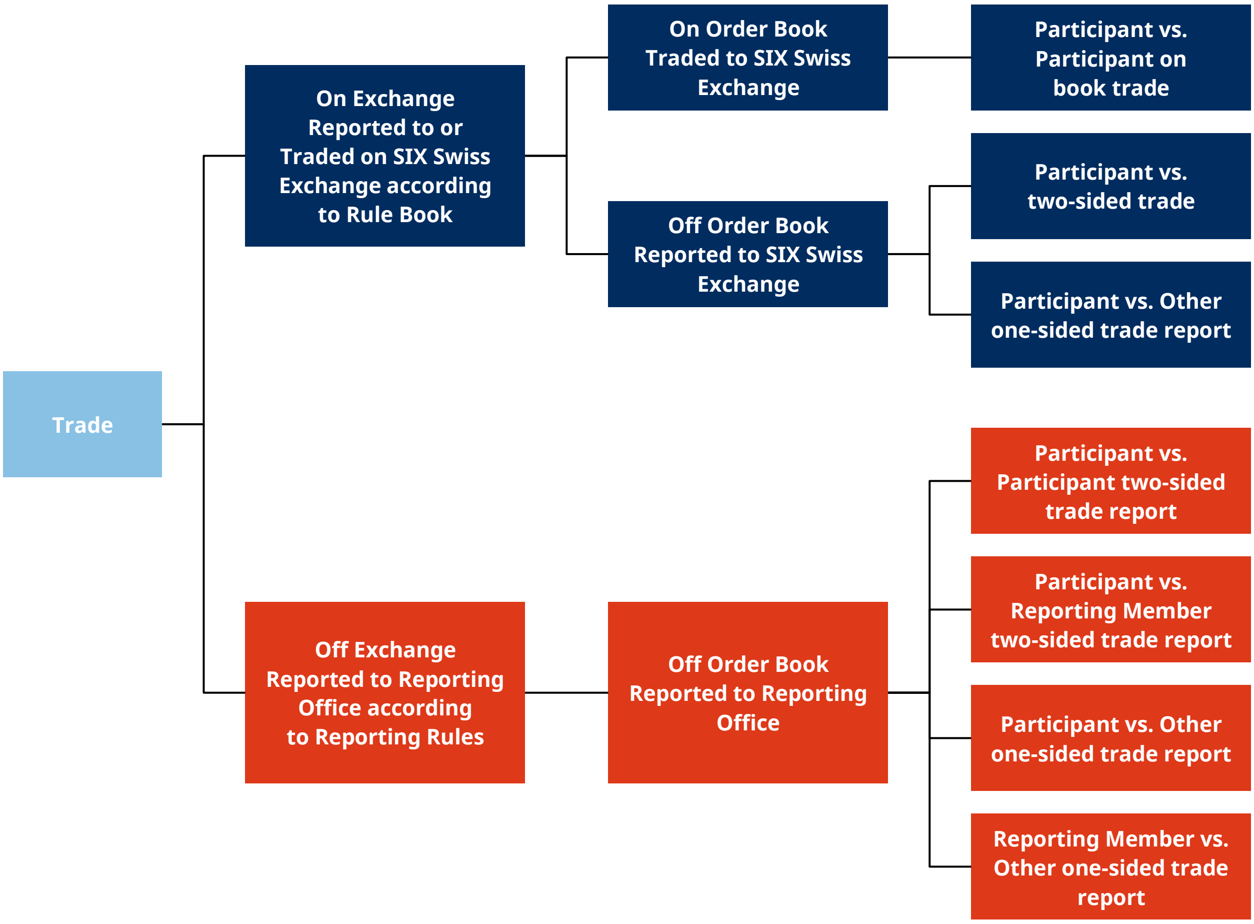
Securities transactions can be categorized as follows, depending on how the transaction is effected:

a) **On-exchange, on-order-book trading:**
Trades which are conducted on-exchange, on-order-book are subject to the Trading Rules. Such trades meet the requirements of post-trading transparency, but must still be reported as Transaction Reports for the purpose of securities trading transparency.

b) **On-exchange, dark-book trading:**
Trades which are conducted on-exchange, dark-book (SwissAtMid) are subject to the Trading Rules. Such trades meet the requirements of post-trading transparency, but must still be reported as Transaction Reports for the purpose of securities trading transparency.

c) **On-exchange, off-order-book trading:**
If both parties to a trade are off-order-book exchange participants, then pursuant to the Trading Rules they can report on-exchange, off-order-book.

d) **Off-exchange trading:**
The Reporting Office Rules apply to trades which participants explicitly do not report to the exchange. If one party is a reporting member, both parties can report the trade only off-exchange.



Trade Report will be published to fulfil SIX Swiss Exchange post-trade transparency requirements.

17.9.3 One- or Two-Sided Trade Reports

One-Sided Trade Report

Those subject to the duty to report trades with those not subject to the duty to report in the form of a one-sided Trade Report. Settlement instructions may not be issued to SIX.

Two-Sided Trade Report

Exchange participants must report any off-order-book trades entered into with other exchange participants or reporting members in the form of a two-sided trade report.

One of the two parties must submit its side of the trade within the prescribed reporting period. The party will receive an immediate acknowledgment of the report from the system (status "pending"). The counterparty involved in the transaction will also be informed of the report (trade message status "alleged").

The counterparty has two options for confirming the trade report within the prescribed reporting period:

a) "Enter and Accept": the trade report submitted is accepted by the counterparty.
b) "Enter and Match": The counterparty sends its side of the trade. The system checks whether the two reports match; if so, it acknowledges the trade with a message to both parties ("Trade Capture Report").

Two-sided trade reports must be confirmed before the end of the following business day (T+1). If confirmation is not submitted within the deadline, the unconfirmed Trade Report will remain in effect and the trade is is considered as reported for the entered participant ("fire & forget").

The party submitting the report can use the "Delete" function to delete any two-sided trade reports that remain unconfirmed before confirmation is received from the counterparty. Unconfirmed two-sided trade reports may be deleted no later than the end of the business day after they were entered (T+1).

Instructions for settlement in respect of two-sided Trade Reports between two participants which are identified as on-exchange may be automatically instructed by SIX Swiss Exchange. Trades involving CCP-eligible securities may also be settled during the business day via a central counterparty.

The decision as to whether a one-sided Trade Report or a two-sided Trade Report needs to be submitted depends on whether the counterparty holds a licence as a securities firm from FINMA or is a foreign participant of SIX Swiss Exchange (SIX Swiss Exchange publishes a list in the file "Party identification and abbreviation (memberlist.csv)" in the Member Section and in the file “Party.txt” using the RDI interface). If this is the case, both parties are obliged to report the trade in the form of a two-sided trade report (subject to the relevant exceptions for foreign participants). Otherwise, the securities firm or foreign participant must report the trade in the form of a one-sided trade report.

Party	Counterparty	Functionality	Reporting Flag (TrdSubType)
Exchange Participant	Exchange Participant	Two-Sided Trade Report	On Exchange or Off Exchange
	Reporting Member	Two-Sided Trade Report	Off Exchange
	Non Securities Firm	One-Sided Trade Report	Off Exchange
Reporting Member	Exchange Participant	Two-Sided Trade Report	Off Exchange
	Reporting Member	Two-Sided Trade Report	Off Exchange
	Non Securities Firm	One-Sided Trade Report	Off Exchange

17.10 Format of the Message

17.10.1 Trade Report

There are two ways to submit trade reports to the central Reporting Office:

a) Standard Trading Interface STI (available only to exchange participants)

b) Web-based reporting tool in the Member Section (available to all participants or reporting members).

Please note:

The Reporting Office and exchange publish separate specifications, which lay down binding, generally accepted standards for the interfaces.

17.10.2 Transaction Report

Reporting Office Rules

The Reporting Office accepts full Transaction Reports which comply with the Swiss format, as described in FINMA Circular 2018/2 (margin numbers 27-30), and governed by the technical specifications.

The Reporting Office accepts full Transaction Reports in the European Union format as specified in the technical implementing standards (Regulatory Technical Standards (RTS 22)) for Art. 26 of Regulation (EU) No. 600/2014 of the European Parliament and of the Council of 15 May 2015 on markets in financial instruments and amending Regulation (EU) No. 648/2012 (MiFIR).

Transaction Reports can be transmitted as a collective file via the Transaction File Interface (TFI or RTS22). These can be uploaded in the Member Section or sent via a batch process.

Please note:
The technical specifications are available in the Member Section.

Sample question:

Trade Reports...

Answer:

a) must be submitted only by exchange participants

b) contain details on the beneficial owner

c) must be submitted by all parties subject to the duty to report, subject to certain exceptions

Answer: c)

Explanation: Subject to certain exceptions, all parties subject to the duty to report must submit a reportable Trade Report. The beneficial owner should be reported together with the Transaction Report. .

17.11 Content of the Message

Reporting Office Rules Art. 2.2

Trading Rules Art. 12.1.1

17.11.1 Content Trade Reports

Trade Reports must contain the following information as a minimum:

a) Identification of the party subject to the duty to report;
b) Transaction type (buy or sell);
c) Precise identification of the securities or derivatives in question (attributes such as the ISIN);
d) Execution volume (depending on the security a nominal value, number of units or contracts);
e) Execution price or price obtained on the market excluding commission and fees (incl. statement of currency);
f) Time of execution (date and time);
g) Information on whether the trade was a proprietary transaction (trading in own name and for own account) or a client transaction (transaction in own name but for the account of the client);
h) Designation of the counterparty;
i) Designation of the trading venue where the securities or derivative were traded, or the notification that the transaction was executed outside a trading venue;
j) Trade Type: designation which further specifies the report (Annex A, Reporting Guide).

17.11.2 Content of Transaction Reports

Transaction Reports in the Swiss format must contain the following information as a minimum:

a) Identification of the party subject to the duty to report;
b) Transaction type (buy or sell);
c) Precise identification of the securities or derivatives in question (attributes such as the ISIN or CFI); and additionally in the case of derivatives the name of the underlying and further determining characteristics of the derivative, namely the classification of the derivative;
d) Execution volume (depending on the security a nominal value, number of units or contracts);
e) Execution price or price obtained on the market excluding commission and fees (incl. statement of currency); and additionally in the case of derivatives, the further value-determining parameters, depending on the classification of the derivative, namely:
    1. whether it is a call or put option,
    2. the strike price,
    3. the price multiplier and
    4. the term of the contract or the expiry date;
f) Time of execution or time of order fulfilment in the case of Transmissions of Orders (date and time);
g) Information on whether the trade was a proprietary transaction (trading in own name and for own account) or a client transaction (transaction in own name but for the account of the client);
h) Designation of the counterparty or, in the case of Transmissions of Orders: designation of the party to whom the order was transmitted;
i) Designation of the trading venue where the securities or derivative were traded, or the notification that the transaction was executed outside a trading venue;
j) Information permitting the beneficial owner to be identified, or in the case of Transmissions of Orders: the designation of the party who transmitted the order;
k) Transaction identification code (trade ID)

The format of the Transaction Report must comply in full with either the Swiss format, as defined in FINMA Circular 2018/2, or with RTS 22. An indication of the transaction identification code (Trade ID) forms part of a complete report in accordance with the Swiss format or RTS 22.

For reportable trades in Swiss securities admitted for trading at a Swiss trading venue, a Transaction Report must be submitted to the Reporting Office. Furthermore, this shall also apply to trades in foreign securities admitted for trading at a Swiss trading venue,

- provided the trade is conducted at a Swiss trading venue or
- outside a foreign trading venue recognised by FINMA

The preceding paragraph also applies to reportable trades in derivatives derived from securities admitted for trading at a Swiss trading venue.

Every Transmission of Orders for securities admitted to trading at a Swiss trading venue or for derivatives derived from securities admitted for trading at a Swiss trading venue which ultimately results in a trade must be reported by Transaction Report to the Reporting Office by every party in the transaction chain which is subject to the duty to report.

The Transaction Report serves to fulfil regulatory requirements and is not published.

17.11.3 Content of Transaction Reports regarding Derivatives

In particular, reported derivatives transactions must contain, depending on the type of derivative:

- ISIN (if available)
- CFI Code
- UnderlyingISIN
- OptionType (if applicable)
- ExpirationDate (if applicable)
- StrikePriceType (if applicable)
- StrikePrice (if applicable)
- LeverageIndicator (if applicable)

Attributes subject to reporting and validations

Additional validations of derivative-specific attributes support Trading Participants and Reporting Members in fulfilling their reporting obligations. Especially if instruments are not traded at SIX and the instrument is not known, the CFI code according to the table below is decisive. The CFI code is determined according to the ISO 10962 classification:

Instrument Type	Description	CFI	Expiration Date	Leverage Indicator	Underlying ISIN	Option Type	Strike Price
Futures		F*****	✓	✓	✓		
Listed options		O*****	✓	✓	✓	✓	✓
Non-listed and complex listed options		H*****		✓	✓	✓	✓
Forwards	Equity - CFD	JE**C*		✓	✓		
Entitlement (rights)	Warrants	RWS***		✓	✓	✓	✓
Swaps	Equity	SE****		✓	✓		

Please note:
A lack of rejection of a Transaction Report does not mean that the Transaction Report is correct or that the reporting obligation has been fulfilled.

Examples:
Some examples of different types of reportable derivatives are listed in the Reporting Guide (link).

17.11.4 Information on the Beneficial Owner

FINMA Circular 2018/2

For the purposes of the duty to report, establishing the identity of the beneficial owner is carried out in accordance with the Anti-Money Laundering Act. By way of exception to this principle, however, operating legal entities, foundations and collective investment schemes are also to be reported as beneficial owners. In the case of trusts, the trustee must be reported.

Natural persons are reported using their nationality and date of birth together with an internal identification number of the party subject to the duty to report created by the subject to the duty to report in the following order:

1. Nationality format: two-letter country code according to ISO 3166-1 alpha-2;
2. Date of birth format: YYYYMMDD;
3. The subjects to the duty to report internal identification number. This can be the master number assigned to the business relationship, even if the subject to the duty to report has several business relationships with the same natural person and has assigned a different master number to each one.

Information about the beneficial owner

Beneficial Owner data fields

Beneficial Owner Type	Data value 1 (BOTC)	Data value 2	Data value 3	Data value 4	Example
Natural person(s)	PRSN	Country Code[1] of the Nationality	Date of Birth	Bank internal identifier	PRSN-CH-19870219-123abc(^PRSN-CH-19891223-789xyz)
Juridical person(s)	Relevant BOTC: LEI, if no LEI available then BIC, CRN, or UID	Country Code of Place of Incorporation[2]	Dataset corresponding to the BOTC		UID-CH-CHE-106.787.008(^UID-CH-CHE-106.842.854)

A juridical person shall be reported using the standardized international identification system for financial market participants, the Legal Entity Identifier (LEI). Where no LEI is available, the Business Identifier Code (BIC), the Commercial Register Number (CRN) or the UID may be reported.

Please Note:

Further information regarding the Beneficial Owner can be found in the Reporting Guide (Link).

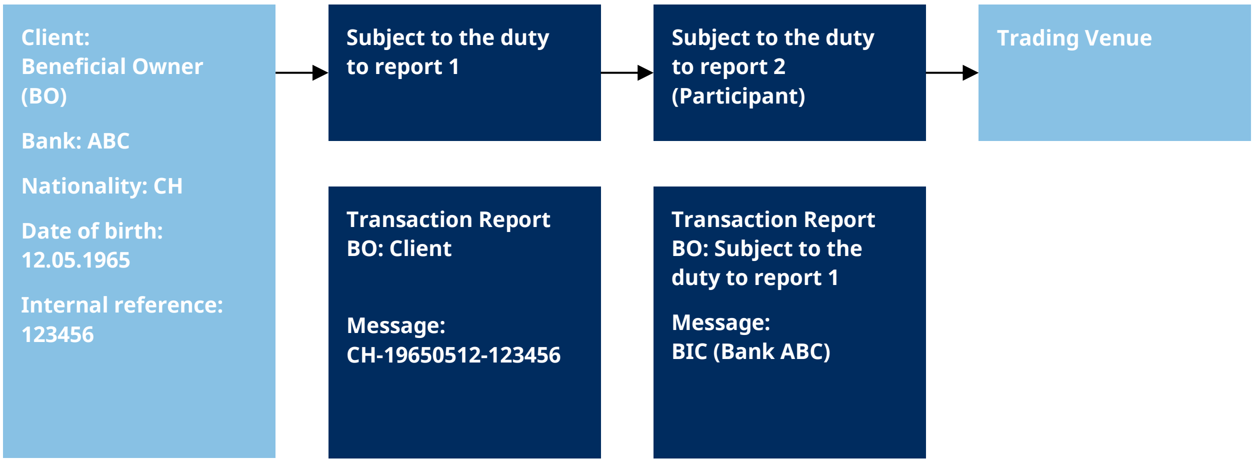
Background information:

If the party subject to the duty to report has recorded more than one nationality for a particular person, it uses the country code that comes first in the alphabetical list according to ISO 3166-1 alpha-2.

If the beneficial owner is an operating legal entity, foundation or collective investment scheme, it is normally reported using the standardised international identification system for financial market participants, the Legal Entity Identifier (LEI). Where no LEI is available, the Business Identifier Code (BIC) according to ISO 9362:2014 or the Commercial Register number preceded by the country code (see Margin no. 28, FINMA Circular 2018/2 Duty to report securities transactions) may be reported..

Alternatively, a disclosure office may accept a full report in the European Union format as specified in the regulatory and technical implementing standards (RTS 22) for Article 26 of Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012 (MiFIR). Natural persons are identified in such reports either as set out in Margin no. 28 above or by means of CONCAT in accordance with Article 6 para. 4 RTS 22.

Example:



17.12 Reporting Deadlines

Reporting Office Rules

17.12.1 Trade Report Deadlines

During trading hours, **Trade Reports** must be submitted to the Reporting Office within the following deadlines after the trade has been effected:

Trades	Latest deadline during trading hours
Equities, Global Depository Receipts, Rights and Options	1 minutes after the trade
Investment funds, Exchange Traded Funds (ETF), Exchange Traded Products (ETP), Sponsored Funds and Structured Products	3 minutes after the trade
Bonds	15 minutes after the trade

Trade Reports for trades outside of SIX Swiss Exchange trading hours must be submitted before the start of trading on the trading day following the trade at the latest.

VWAP (Volume Weighted Average Price) trades must be reported to the Reporting Office with the actual VWAP achieved and "Special Price" Trade Type no later than 30 minutes after the close of trading if the trade is an off-order-book fixed price transaction.

Trade reports for trades in equities and global depository receipts carried out in connection with a delta-neutral hedge with respect to a derivative transaction must be reported within 5 minutes at the latest.

17.12.2 Delayed Publication

Reporting Office Rules Appendix B

Directive 3 V

Off-oder-book trades in equities and bonds may be published with a delay.

Under certain conditions those subject to the duty to report may apply for deferred publication by marking the report accordingly.

The provisions on delayed publication otherwise apply to the rules in the Appendix "Delayed publication".

17.12.3 Transaction Report Deadlines

Transaction Reports must be submitted by the close of trading on the next trading day at the latest.

17.13 Correction, Cancellation of Reports and Countertrades

17.13.1 Correction

Reporting Office Rules

Directive 3 V

Trade Reports
The party subject to the duty to report may correct the information on whether the trade was a nostro (Principal) or a client transaction (Riskless Principal) in a Trade Report. A Trade Report may only be corrected once. The correction must be made at the latest by 10.00 pm (CET) on the trading day following the submission of the report.

Corrections can be reported via the Standard Trading Interface (STI) or via the Reporting GUI.

A trade can be corrected only once.

If the trade is settled by a central counterparty, the correction must be made on the same clearing day. In the case of trades with no central counterparty, the correction must be made by no later than the following trading day.

The stock exchange no longer instructs corrections to stock exchange trades for clearing and settlement.

Transaction Reports

To correct a Transaction Report, the Transaction Report must be deleted and the corrected Transaction Report must be resubmitted to the Reporting Office by the party subject to the duty to report. The correction must be made at the latest by 10.00 pm (CET) on the fifth trading day following the submission of the report to be corrected.

17.13.2 Cancellation

Trade Reports
Trade Reports may be cancelled upon application by the parties involved in the Trade Report.

In the case of incorrect Trade Reports (i.e. those which do not comply with Clause 2.2 in the Reporting Office Rules and in the Trading Rules Clause 12.1.1), those subject to the duty to report are obliged to cancel or to request cancellation of the Trade Report with the Reporting Office.

Central counterparty clearing (CCP) trades can be cancelled only on the trading day (T).

Transaction Reports
Incorrect **Transaction Reports** must be cancelled by those subject to the duty to report themselves.

The cancellation must be made within five trading days after the transaction report has been sent.

17.13.3 Countertrade

A party subject to the duty to report may make a countertrade. When reporting the counter-trade, the ID of the original trade must be given, and the report must be marked with the "Special Price" Trade Type.

17.14 Registration and Reporting Tools

Those subject to the duty to report must be registered with the Reporting Office before they are able to submit reports. They will receive a registration number. Participants of SIX Swiss Exchange are deemed registered. Those subject to the duty to report must report any transactions required to be reported using the tools and technologies provided by the Reporting Office.

17.15 Settlement of Trade Reports

The trade report provides participants with the following three clearing and settlement options for the purpose of settling trades with other participants.

a. Automatic

The trade report is settled automatically in accordance with the clearing and settlement instructions on the exchange system (clearing via central counterparty (CCP] and settlement at the Central Securities Depository (CSD]).

> **Please note:**
>
> Trade reports may be submitted until 10.00 pm. The clearing day (processing via CCP) ends at 6.15 pm, so automatic settlement after 6.15 pm is not possible. If the "automatic" option is selected after 6.15 pm, the exchange system will initiate the next available settlement option "bilateral".

b. Bilateral (No CCP)

The trade report should not or cannot be processed by the CCP. The trade report is therefore automatically instructed by the CSD without the involvement of the CCP.

- The trade report is entered other than on the clearing day.
- Commission contained in the Delivery Report
- The security is not CCP-eligible
- Other than T+2

c. Manually

Clearing and settlement is initiated by the two participants involved in the Trade Report by manually entering instructions.

17.16 Publication Requirement (not relevant for the Trader Exam)

17.16.1 Market Transparency

Directive 6: Market Information

The need for transparency is served through publication of market information by SIX Exfeed Ltd, a subsidiary of SIX Swiss Exchange. The latest market price with the volume and time, the best bid and ask price with volume and market depth, the cumulative daily transaction volume on the stock exchange both on and off the order book, the status of the order book, trading times and any interventions by the Exchange are disseminated to external information providers (SIX Financial Information, Thomson Reuters, Bloomberg, etc.) via the Market Data Interfaces ((IMI = ITCH Market Data Interface (low latency) und SIX MDDX Multi-Dimensional Data fluX® Interface (SIX MDDX)) of the exchange system. In addition to this trading data, registered traders and reporting agents also have access to the central order book as well as ongoing, real-time price and volume information regarding on-exchange, off-order-book trading (subject to the right to delay publication).

Further information is set out in Directive 6: Market Information

17.16.2 Use of Market Information transmitted on the SWXess Trading Platform

Market information (market and securities reference data) can be accessed and used by interested departments and individuals within the exchange participant. Information may be passed on within the organisation subject to a fee. Market information can be forwarded to branch offices. Market information may only be forwarded from the technical interface of the SWXess trading platform.

Market information may be disclosed to third parties in accordance with the SIX Exfeed Ltd Data Distribution Agreement as applicable from time to time. The exchange participant must ensure that the third party gives a contractual undertaking not to distribute any data received. Any agreements to the contrary between the exchange participant and SIX Exfeed Ltd take precedence over this rule.

If exchange participants avail themselves of the additional option to allow market information to be used within their organisation by parties other than registered traders, or of the option to disclose market information to external third parties, SIX Swiss Exchange or its affiliate SIX Exfeed Ltd will charge market data fees (exchange fees). Such fees apply to the provision of data and the use of the SWXess trading platform interfaces in accordance with the Trading Rules and applicable Directives.

17.16.3 Transparency created by the Publication Requirement

Further information:
- FMIA
- FinIO
- FMIO
- FMIO
-FINMA

SIX Swiss Exchange has a statutory obligation to publish all information necessary for the transparency of securities trading. This publication obligation applies to price information and the volume of securities traded on exchange. The publication requirement is set out in detail in FMIA Article 39 ff, FinIO Art. 51 and FMIO Art 2 ff.

17.16.4 Published Data

- The last exchange price with volumes and time (continuous transmission)
- The best bid and ask prices with volumes (cumulative, continuous)
- The trading period and any intervention by the Exchange (e.g. suspension of trading in a security)
- The order book status (trading, pre-opening, stop trading, suspended, break, between auctions)
- Market depth

17.16.5 Method of Publication

There are no specific statutory provisions regarding the time and manner of publication The participants of SIX Swiss Exchange receive information in real time through the trading system or through additional electronic feeds with the help of SIX Exfeed Ltd:

- ITCH Market Data Interface (IMI)
- SIX MDDX Multi-Dimensional Data fluX® (SIX MDDX)

Information vendors such as SIX Financial Information, Thomson Reuters and Bloomberg make this information available to the public based on these feeds.

17.17 Reporting GUI und Transaction Report in the Swiss Format (TFI)

For instructions on how to use the Reporting GUI, see the Help function.

Transaction Report in Swiss format (TFI) pursuant to FINMA Circular 2018/2 (Margin No. 27-30) and as stipulated in the technical specifications.

Sample question:

Is it necessary to report trades in equities as a Transaction Report within one minute?

Answer:

a) false

b) true

Answer: a)
Explanation: Trades in equities must be reported as a Trade Report within one minute and as a Transaction Report by no later than the close of trading on the following trading day.

18 Trade Types & Flags of SIX Swiss Exchange

Trade flags may be used on SIX Swiss to indicate specific order attributes and trade types for trade reports. These can be applied either automatically or manually.

18.1 Trade Type Flags

a) **"Special Price"** specifies a report, the price of which differs from the market price at the time of entry (VWAP, portfolio trade, countertrade, Trade Report following an emergency situa-tion, etc.).

b) **"Deferred Publication"** specifies a report which is to be published by the Reporting Office after a certain delay.

c) **"Off-Exchange"** specifies a report of a trade which is not subject to the provisions of the Trading Rules of SIX Swiss Exchange.Kén

d) **"Both Parties"** specifies a one-sided Trade Report which is submitted to the Reporting Office in the name of both of the parties involved in the trade.

e) “Derivative Hedge” specifies a report for a trade made in connection with a delta-neutral hedge with respect to a derivative transaction.

18.2 Trade Type for identifying Special Pricing Methods

"Special Price" is set manually for trade reports where the price differs from the market price at the time of entry. In particular, this must be used in the following cases:

- **VWAP** trade executions
- **Portfolio Trades:** a portfolio trade is defined as the buying or selling of a basket of at least ten different securities with a total value of at least CHF 1 million that is concluded as a single transaction between an exchange participant and a client.
- **Aggregated Orders**: an aggregated order is a trade in a security comprising several individual client orders. An aggregated order may consist either of buy or sell orders (no netting).
- Countertrade
- **Trade Reports** following emergency situations

18.3 Trade Flags identifying other Properties

- **"Internal Cross"** automatically indicates a trade for one and the same beneficial owner.
- **"Removed Liquidity"** indicates the transaction side that triggered the transaction in the order book.
- **"Added Liquidity"** indicates the transaction side that supplied liquidity to the order book.
- **"Auction"** indicates that a transaction was effected during an auction.
- **"Do not Publish"** indicates that a trade in an international bond will be published monthly on a cumulative basis, separated into market segments.

*The "Trading Guides" of SIX Swiss Exchange provide a complete list of all trade types and flags.

19 Clearing and Settlement

19.1 The Swiss Value Chain

The Swiss Value Chain is the grouping of electronic systems of SIX Swiss (trading), SIX x-clear Ltd (clearing), SIX Securities Services (settlement) and the Swiss National Bank (funds transfer). This provides very high processing speeds and high levels of efficiency.

The exchange transaction type applies only to transactions in securities traded on SIX Swiss Exchange. These transactions are transferrable and payable two bank business days after execution (T+2), i.e. delivery and payment of an exchange transaction are based on applicable standard practices.

Clearing for issues listed on SIX Swiss Exchange is available between 8.00 am and 6.15 pm CET. Consequently, clearing before 8.00 am and after 6.15 pm cannot be carried out through a central counterparty.

Cancellations carried out after the close of the clearing day can no longer be cleared through a central counterparty, but must be settled bilaterally between the parties involved. However, the trader is free to undertake settlement automatically or manually.

Settlement for issues listed on SIX Swiss Exchange is available between 6.00 am and 10.00 pm CET.

19.1.1 Trade

The tasks and functions performed by each financial market infrastructure component and the interactions between them can be illustrated using a practical example of an equity transaction, which has been executed, cleared and settled using the Swiss Value Chain. In our example we posit that Bank K wishes to purchase 1,000 registered shares of a Swiss blue chip, while

Trader V wishes to sell 1,000 units of the same stock. Each party indicates its interest by entering a buy or sell order in the electronic trading platform of SIX Swiss Exchange, where the shares are listed and can be traded. SIX Swiss Exchange collects the buy and sell orders of its exchange participants and executes these in accordance with its matching rules.

19.1.2 Clearing

Let us assume that matching takes place on Monday, 21 January 20xx in a CCP-eligible product (not all products qualify, Link). The moment the buy and sell orders are matched, the central counterparty (CCP), SIX x-clear Ltd, automatically steps between the two trading parties and becomes the seller to Bank K and the buyer from Trader V. This results in the following two contracts:

1. Trader V undertakes to deliver the 1,000 registered shares to SIX x-clear Ltd on the settlement date (Wednesday, 23 January 20xx); SIX x-clear Ltd undertakes in return to remit the amount of the transaction to Securities Trader V on the same date.
2. SIX x-clear Ltd undertakes to deliver 1,000 registered shares of the Swiss Blue Chip to Bank K on the settlement date (Wednesday, 23 January 20xx); Bank K in turn undertakes to remit the full amount to SIX x-clear Ltd on the same date.

As central counterparty, SIX x-clear Ltd guarantees the fulfilment of its obligations. As part of its risk management practices, SIX x-clear Ltd requires collateral in the form of margins and contributions to a default fund – a type of insurance pool – which can be used to cover any losses as needed. The margins and default fund contributions required of exchange participants will depend on the amount and volatility of their risk positions and on their credit rating.

19.1.3 Settlement/Payment

On the settlement date, 23 January 20xx), the above obligations are settled over the interface between the SIC payment system and SECOM securities settlement system of SIX Securities Services as follows:

1. SECOM checks whether Trader V has sufficient registered shares of the issue in question on its SIX Securities Services custody account; if so it blocks 1,000 units. Next SECOM sends instructions to SIC to settle the cash side of the transaction. Provided that SIX x-clear Ltd has sufficient funds with the SNB, the amount is transferred via SIC in favour of Trader V. SIC then confirms the successful settlement of the cash side to SECOM, whereupon the blocked 1,000 registered shares are transferred directly from Trader V's custody account to the SIX x-clear Ltd custody account.
2. SECOM checks whether SIX x-clear Ltd has sufficient registered shares in its SIX Securities Services custody account; if this is the case, it will block 1,000 units. At the same time, SECOM sends instructions to SIC to settle the cash side of the transaction. Provided that Bank K has sufficient funds with the SNB, the full amount is transferred via SIC in favour of SIX x-clear Ltd. SIC then confirms the successful settlement of the cash side to SECOM, whereupon the blocked 1,000 registered shares are transferred directly from the SIX x-clear Ltd custody account to Bank K's custody account.

19.1.4 Buy-In

In the exceptional case that the seller cannot deliver all of the shares sold on the settlement date, 23. January 20xx, a buy-in operation must be undertaken.

For CCP-eligible instruments settled through the SIX x-clear Ltd clearinghouse, buy-in is triggered 4 days after the settlement date (i.e. trade date +6 days).

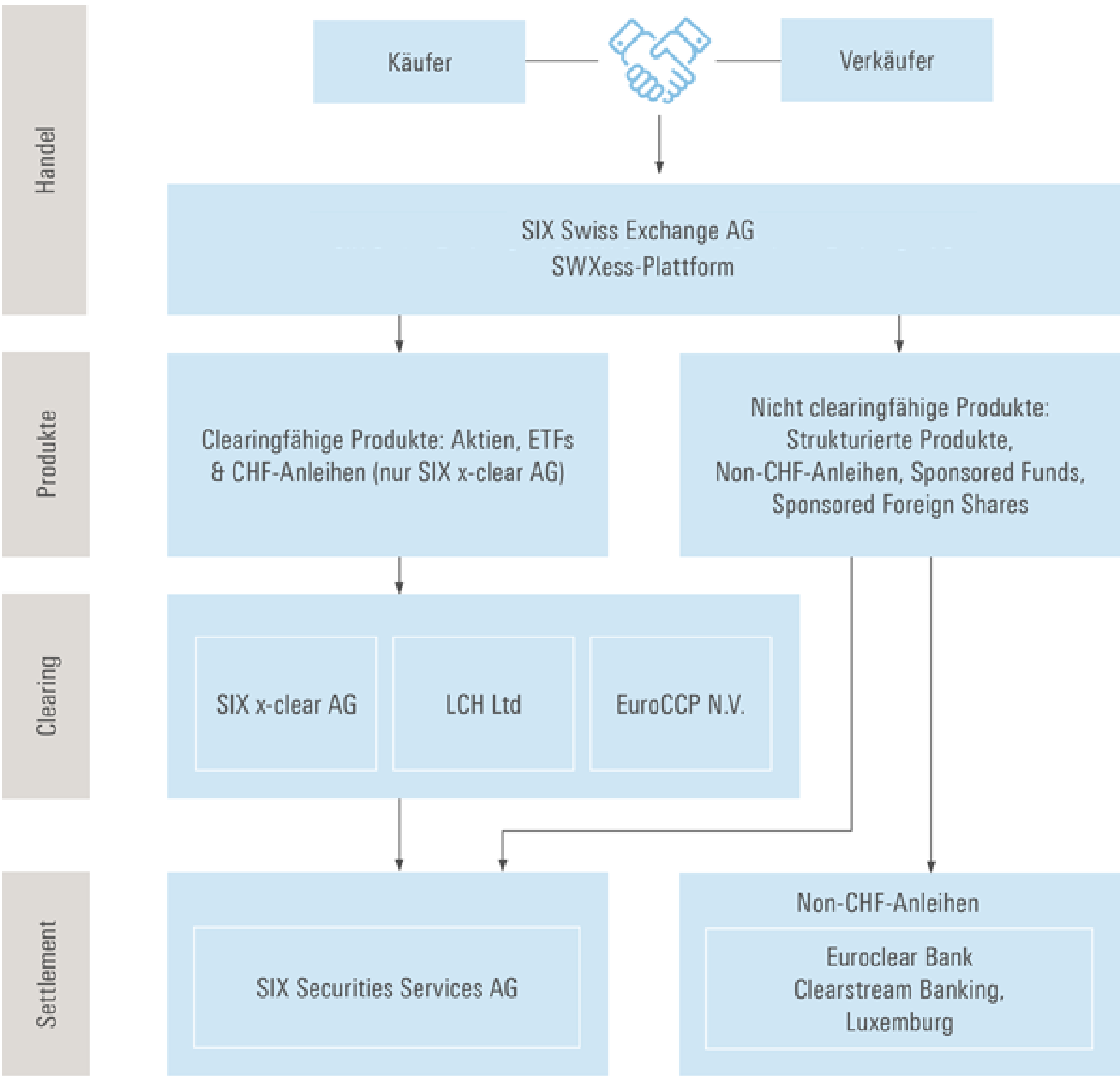


Figure: Swiss Value Chain

Source: https://www.six-group.com/en/products-services/the-swiss-stock-exchange/trading/trading-provisions/clearing-and-settlement.html

20 Regulatory Structure of SIX

20.1 Self-Regulation

The Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (FinMIA) contains the following delegation of powers under the heading 'Self-regulation'

FMIA Art. 27

Art. 27 FMIA: Self-Regulation

1 The trading venue shall establish under FINMA supervision its own regulatory and supervisory organisation which is appropriate for its activity.

2 The regulatory and supervisory tasks delegated to the trading venue must be carried out by independent bodies. The directors of these bodies must:

a. provide the guarantee of irreproachable business conduct;
b. enjoy a good reputation; and
c. have the specialist qualifications required for their functions.

3 The selection of the directors under paragraph 2 requires the approval of FINMA.

4 The trading venue shall submit its regulations and their amendments to FINMA for approval

Self-regulation, as opposed to government regulation, essentially means that the necessary rules and procedures are adopted within the private sector.

Remark:

Self-regulation, as opposed to government regulation, essentially means that the necessary rules and procedures are adopted within the private sector.

The principle of self-regulation enshrined in Art. 27 of the FMIA applies to the organisation and monitoring of trading activity as well as to the rules governing exchange membership and the listing of securities. This principle of self-regulation gives exchanges a degree of autonomy that is determined on an individual basis.

Stock exchange self-regulation is subject to oversight by the Swiss Financial Market Supervisory Authority (FINMA) as the state regulatory body.

The regulatory bodies of SIX Group Ltd are structured according to the principle of separation of powers, are independent of the respective business units and are made up as follows:

- The regulatory bodies of SIX Group AG are structured according to the principle of separation of powers and are composed as follows: Regulatory Board (legislative)
- SIX Exchange Regulation (executive)
- Judicial bodies (judiciary)

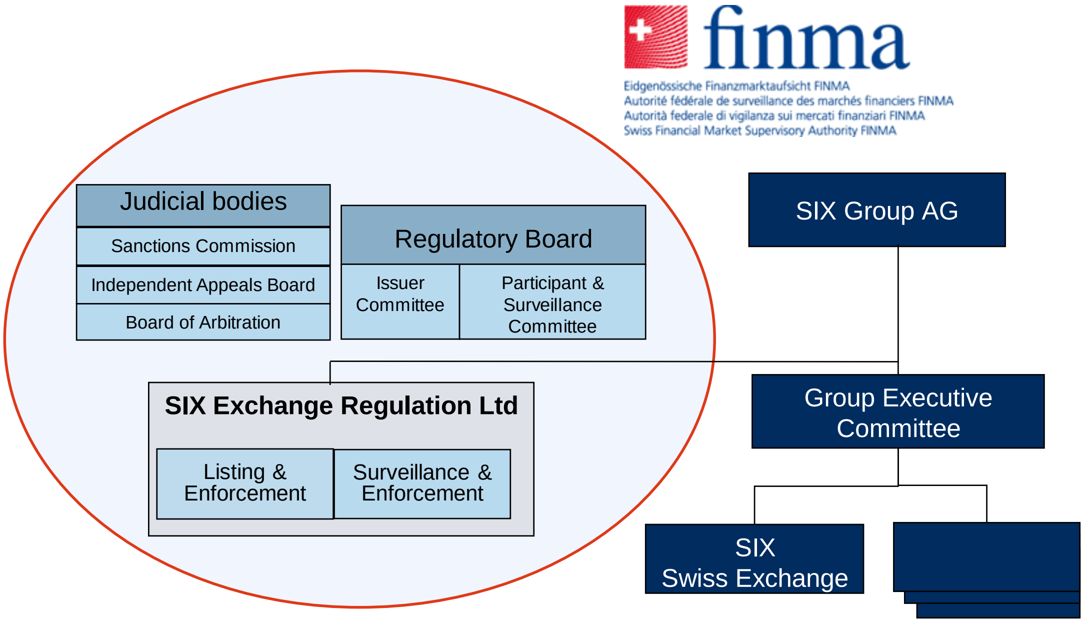


Figure: Regulatory structure of SIX

The success factors of self-regulation are market proximity, broad acceptance, from market participants for market participants, transparency, efficiency and effectiveness, as well as agility and expertise. As the predominant model worldwide, self-regulation is a decisive success factor in a rapidly changing international stock exchange environment.

20.2 Regulatory body: The Swiss Financial Market Supervisory Authority (FINMA)

FINMA acts as the 'umbrella' supervisory authority for SIX Swiss Exchange as well as in the area of various supervisory laws. Depending on the underlying legislation, FINMA performs prescribed regulatory functions with specific objectives in relation to a range of public bodies, organisations and types of entity.

Authorised banks, securities dealers, insurance companies, collective investment schemes and their asset managers and fund management companies are subject to prudential supervision; in other words, they are monitored in a comprehensive, ongoing manner in accordance with a risk-based approach. FINMA's mandate is to protect creditors, investors and insured persons against the consequences of a company becoming insolvent, unfair commercial practices or unequal treatment. At the same time, FINMA is responsible for ensuring that the financial markets continue to function effectively.

20.3 Regulatory Board

Pursuant to its self-regulatory duties under stock exchange legislation, the Regulatory Board is the supreme body for the regulation of issuers, participants and traders (***rule-making body***). It consists of a maximum of 17 members, which are elected by the Board of Directors of SIX Group Ltd. In addition, a member of the Board of SIX Group Ltd will be appointed ex officio. Economiesuisse will nominate three candidates as a member. The Regulatory Board is also responsible for setting up the Issuers Committee and Participants & Surveillance Committee.

Regulatory Board

- Supreme body for the regulation of issuers, participants and traders
- Rule-making body (regulations)
- Delegates some of its power to the below-mentioned committees

Issuers Committee

- admission of new issuers and products
- may issue guidelines

Participants & Surveillance Committee

- participant regulation
- may issue directives

The Committees
- prepare the regulations and additional regulations to be issued by the Regulatory Board
- practical implementation of regulatory rules and guidelines (unless responsibility for implementation is reserved for the Regulatory Board or has been delegated to SIX Exchange Regulation)

The trading venue shall submit its regulations and their amendments to FINMA for approval.

Figure: Overview Regulatory Board

20.3.1 Participants & Surveillance Committee

The Regulatory Board delegates some of its powers with respect to participants and surveillance to the Issuers Committee, which is composed of a Chairman and a maximum of six other members. The Committee for Participant & Surveillance Committee shall consist of at least five members.The Committee is chaired by the Vice Chairman of the Regulatory Board. The Participants & Surveillance Committee is responsible for issuing the implementation provisions of the regulations.

The Participants & Surveillance Committee has the following tasks:

- preparation of the Rule Books to be issued by the Regulatory Board
- issuing directives for participants and traders
- conducting consultations and hearings on the rules books and directives to be issued
- delegation of tasks in whole or in part to SIX Exchange Regulation

20.4 SIX Exchange Regulation Ltd

SIX Exchange Regulation performs the duties prescribed under federal law in relation to the regulation of issuers and participants, implements the rules adopted by the Regulatory Board, and monitors compliance with such rules. It is therefore the ***executive*** power under self-regulation. SIX Exchange Regulation as a 100% subsidiary of SIX Group Ltd is independent of the SIX operating entities from a staffing, organisational and legal standpoint.

In the area of issuer regulation, SIX Exchange Regulation is responsible for the admission of securities and monitors compliance with the Listing Rules.

In the area of participant regulation, trades executed on the SIX trading centres are monitored in such a way that the exploitation of insider information, price and market manipulation can be detected.

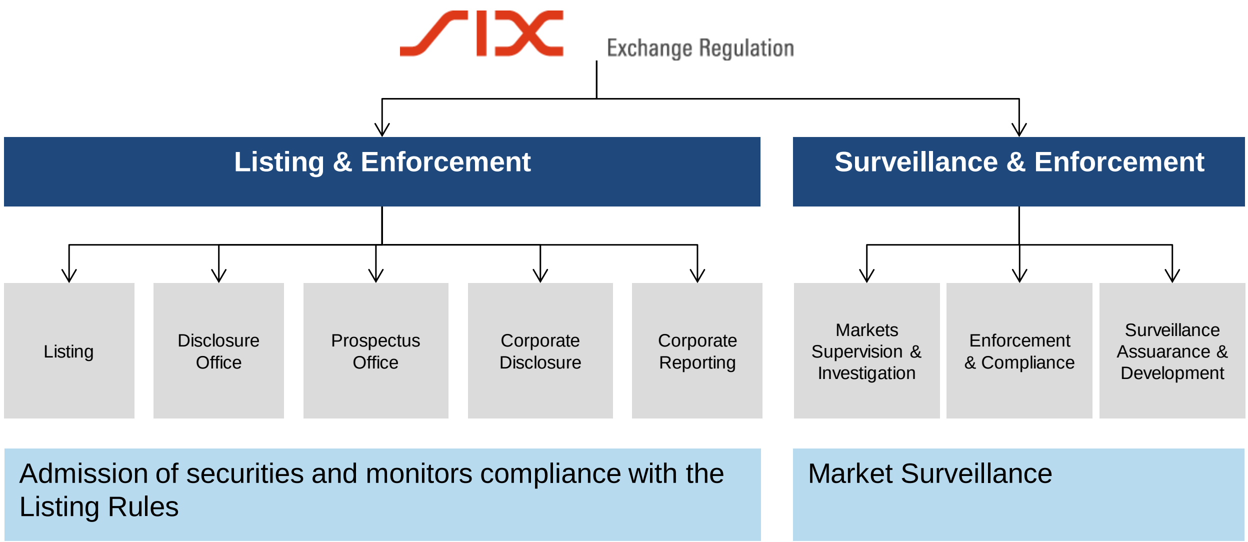


Figure: Organisation chart of SIX Exchange Regulation

20.5 Judicial Bodies

The SIX ***Judicial Bodies*** are responsible for enforcing the rules adopted and decisions made by the regulatory bodies. The Judicial Bodies comprise the

- Sanctions Commission
- Independent Appeals Board
- Board of Arbitration

20.5.1 Sanctions Commission

The Sanctions Commission can impose sanctions against individuals and legal entities that are subject to the Rule Book, the Listing Rules and the Additional Rules. In the case of proposals from SIX Exchange Regulation, it has full discretion in deciding on sanctions. It consists of between five and eleven members. The Chairman of the Sanctions Commission and half of its members are elected by the Regulatory Board, with the remaining members appointed by the Board of Directors of SIX Group Ltd.

In addition, the Sanctions Commission assesses complaints against sanction notices that the investigative bodies have issued directly within the scope of their responsibility. It may, with a view to ensuring that proper sanctions proceedings are carried out,

- reject the matter and return it to the relevant investigative body
- or instruct the relevant investigative body to carry out further clarification.

Decisions on the suspension and exclusion of participants and traders, as well as on the suspension of trading and delisting, may be referred to the independent Appeals Board. Appeals against other decisions may be taken directly to the Board of Arbitration.

20.5.2 Independent Appeals Board

The FMIA requires the establishment of an independent appeals board to hear and determine appeals against

- decisions on the admission, suspension and exclusion **of participants**,
- appeals against the admission and suspension **of traders** and the revocation of trader registration
- appeals from **issuers** against decisions regarding listing, the suspension of trading, and delisting.

20.5.3 Board of Arbitration

Once a decision has been made by the lower-level body, a complaint may ultimately be referred to the Board of Arbitration. Decisions of the Board of Arbitration are final and binding.

The Board of Arbitration is based in Zurich and consists of a chairman and two arbitrators, with an arbitrator appointed by each of the parties involved in the case. The chairman and his deputy are appointed by the President of the Swiss Federal Supreme Court for a four-year term of office.

The specific procedures and practices of the Judicial Bodies are set out in section 4.4 ff.

20.6 Stock exchange rules and regulations in the context of self-regulation

20.6.1 Rule Book (RB)

Purpose

RB Clause 1

RB Clause 1 Purpose

Under the FMIA, the Rule Book governs the **admission of securities dealers as participants on the Exchange**, the organisation of securities trading on the Exchange and the rules of conduct for participants and their traders.

The Rule Book aims to ensure equal treatment of investors and participants as well as the transparency and proper functioning of securities trading on the Exchange.

Structure of the Rule Book

The Rule Book is divided into five parts as follows:

- The **Admission** section governs admission to participate in trading on the Exchange, the rights, obligations and exclusion of participants, and the suspension and termination of participation.
- The **Trading** section governs the organisation of trading on the Exchange, including how trades come about.
- The **Clearing and Settlement** section describes the clearing and settlement of trades on the Exchange.
- The **Monitoring and Enforcement** section governs how Rule Book compliance and enforcement are monitored, as well as the sanctions that may be imposed in the event of violations.
- The **Final Provisions** govern the confidentiality and partial invalidity of the Rule Book, how it may be amended, its binding nature, applicable law, place of jurisdiction, and transitional provisions.

20.6.2 Directives

The Directives are specific requirements that support and lend specificity to the rules of SIX Swiss Exchange.

Admission	Directive 1: Admission Admission process Admission as a market maker Deposit Appropriate organisation Registration requirements and trader examination Directive 2: Technical Connectivity
Trading	Directive 3: Trading Trading day and trading period Clearing day Trading hours Order and quote Price-time priority Auction and principle of highest executable volume Continuous trading Reference price adjustment Trade suspension Market models Reporting of trades to the Exchange Correction and cancellation of trades Trading segments with detailed rules for each segment Trading on a separate trading line (equities)
Trading	Directive 4: Market Control Mistrades Extraordinary situations Directive 5: Alternative Trading
Data/Sponsored Access	Directive 6: Market Information Directive 7: Sponsored Access

21 Ad hoc publicity and disclosure of shareholdings

21.1 Ad-hoc publicity

LR
Art. 53

The rules on ad hoc publicity are intended to ensure that issuers inform the public in a fair and transparent manner and at the earliest possible stage about significant developments and changes in their company. Transparency and equal treatment for investors, together with the proper functioning of the securities markets, must be guaranteed by providing both actual and potential market participants with new and potentially price-sensitive information quickly and fairly. Ad hoc publicity should also encourage correct pricing. Furthermore, ad hoc publicity prevents insider trading by rapidly reducing information advantages.

The issuer is responsible for timely and correct fulfilment of the duty to provide information when price-sensitive facts emerge (see Arts. 7 to 9 Directive Ad Hoc Publicity, DAH). The issuer makes its decision using its discretion, taking into account the company's internal division of responsibilities. In terms of timing, issuers must organise themselves in such a way that timely fulfilment of its obligations to provide information is always guaranteed.

Art. 53 Listing Rules

1 The issuer must inform the market of any price-sensitive facts which have arisen in its sphere of activity. Price-sensitive facts are facts whose disclosure is capable of triggering a significant change in market prices. A price change is significant if it is considerably greater than the usual price fluctuations.

1bis The disclosure of the price-sensitive fact must be capable of affecting the reasonable market participant in his investment decision.

1ter Annual and interim reports pursuant to Art. 49 and 50 LR from issuers with primary listed equity securities must always be distributed with an ad hoc announcement pursuant to Art. 53 LR.

2 The issuer must provide notification as soon as it becomes aware of the main points of the price-sensitive fact.

2bis The disclosure of information on price-sensitive facts must begin with a classification as "Ad hoc announcement pursuant to Art. 53 LR".

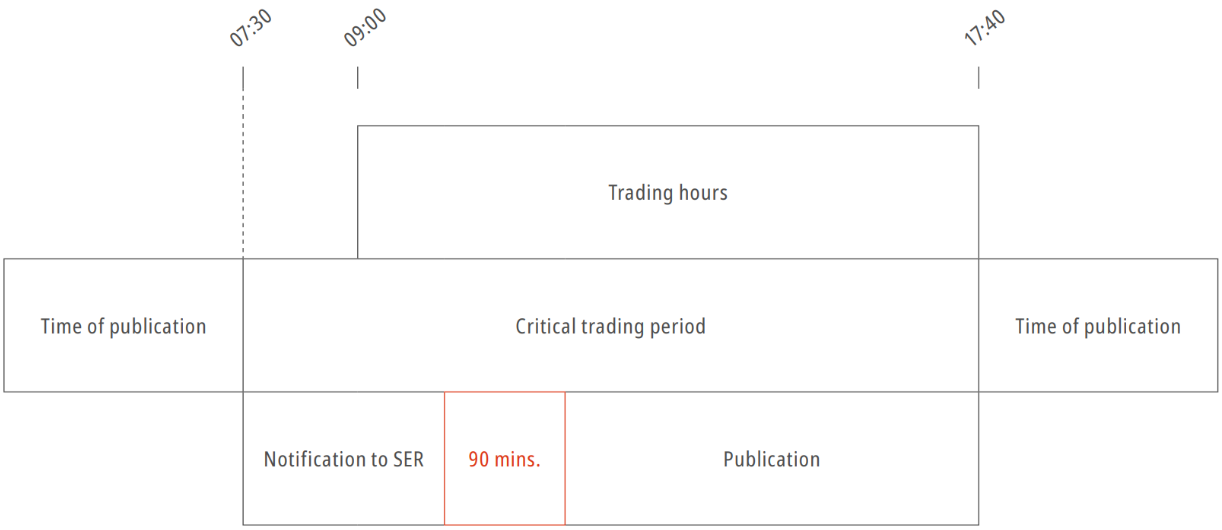
3. Disclosure of ad hoc announcements must be made so as to ensure the equal treatment of all market participants.

Facts include, for example:

- Structural changes (e.g. mergers)
- Capital changes
- Any material change in the issuer's profitability
- Any material change in the course of business
- Unexpected personnel changes involving key positions at the company

Disclosure must be made in a manner that ensures to the greatest extent possible the equal treatment of all SIX Swiss Exchange participants. Ad hoc announcements are intended to provide all market participants with information at the same time, thus ensuring market transparency (see Art. 53 LR). Finally, the announcement should lead to more efficient price formation and indirectly also to an increase the liquidity in the respective securities.

The issuer must submit any announcement to SIX Swiss Exchange no later than 90 minutes before the start of trading or its publication.



The ultimate objective is to ensure total market transparency and that information is supplied simultaneously to all market participants (Art. 53 LR)

Note:

It should be noted that rumours, ideas and intentions are not facts.

Deferred publication

However, the issuer may postpone the announcement of price-sensitive information accdoring to Art. 54 LR if:

1. The new facts are based on a plan or decision of the issuer; and
2. Its dissemination is likely to prejudice the legitimate interests of the issuer.

In such cases, the issuer must ensure that such facts are kept completely confidential.

Sample question:

What is the purpose of the ad hoc publicity rules?

Answers:

a) Equal treatment of market participants
b) Protection against hostile takeovers
c) To ensure that securities transactions have a business purpose

Answer: a)

Explanation: The purpose of ad hoc reports is to provide information to all market participants at the same time as far as possible. Protection against hostile takeovers falls under the disclosure obligations for shareholdings.

21.2 Disclosure of shareholdings

21.2.1 Overview

The chart below shows the relationship between the disclosure of shareholdings and public takeover offers:

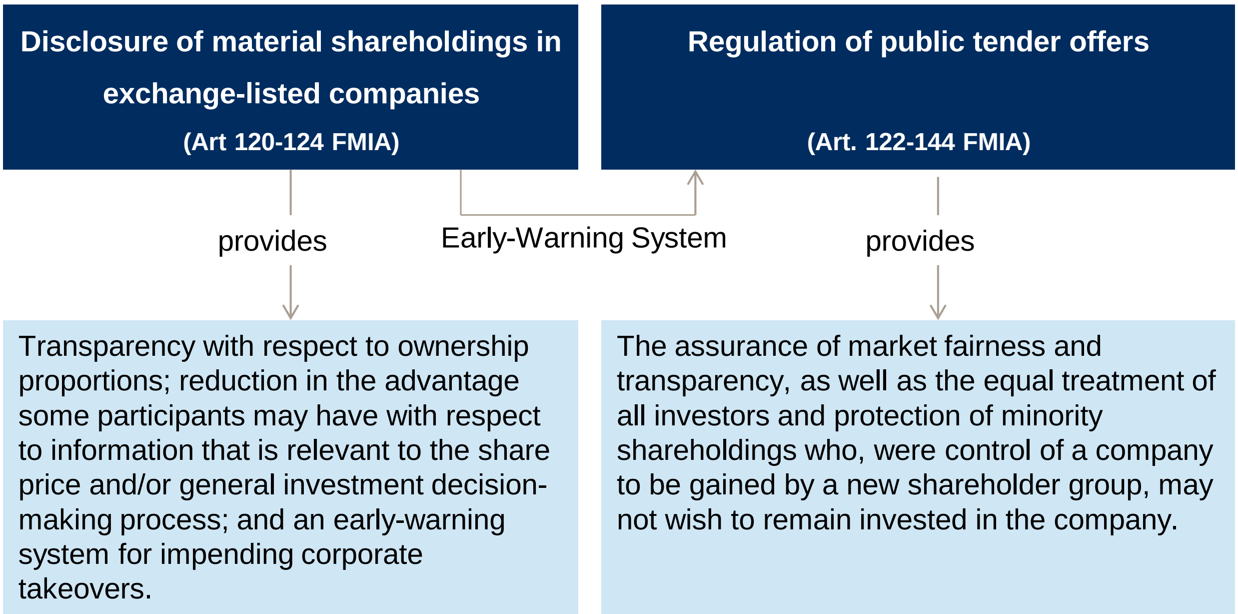


Figure: Relationship between the disclosure of shareholdings and public takeover offers

The disclosure of shareholdings and public takeover offers is a wide-ranging subject. The information below is intended to provide only a brief overview of the key issues.

21.2.2 Objective and purpose

FMIA Art. 1, Purpose, Art. 120 Obligation to notify

In order to ensure sufficient trading **transparency**, a disclosure requirement applies to significant shareholdings (and changes therein) in companies domiciled in Switzerland that have at least a portion of their equity securities listed on SIX Swiss Exchange, and in companies domiciled abroad that have the main listing of their equity securities in Switzerland.

The requirement for significant shareholders to disclose information has two principal purposes:

- Firstly, to ensure transparency with regard to major shareholdings and economic interests in a company and hence the equal treatment of all market participants in terms of that information.
- Secondly, the disclosure obligation is intended, among other things, to prevent **creeping tender offers** or the **covert** sale of significant shareholdings.
-

21.2.3 Basis in statutes and implementing ordinances

FMIA Art. 120 ff

FMIO-FINMA 10ff

The legal basis for the disclosure of shareholdings can be found in Art. 120 ff. FMIA. In addition to the applicable provisions of the Financial Market Infrastructure Act, the FMIO-FINMA specifies when the obligation arises, the scope of the obligation and the reporting procedure.

21.2.4 Time at which the reporting obligation arises

FMIA Art. 120, Obligation to notify

Anyone who directly, indirectly or in concert with third parties acquires or sells shares or purchase or sale rights to the shares of a company domiciled in Switzerland the equity securities of which are listed in Switzerland, or a company domiciled abroad with the main listing of its equity securities in Switzerland, and thereby attains, falls below or exceeds the threshold percentages of **3, 5, 10, 15, 20, 25, 33⅓, 50 or 66⅔ percent of voting rights**, whether or not such rights may be exercised, must notify the company and the stock exchanges on which the equity securities in question are listed. The matter must be reported within four trading days of the reporting obligation arising, both to the company concerned and to SIX Swiss Exchange.

Example:

The Commercial Register entry for Y AG, a company that has its registered office in Zurich and is listed on SIX Swiss Exchange, shows the following allocation of shares:

1,000,000 registered shares at CHF 50	CHF 50,000,000
5,000,000 bearer shares at CHF 100	CHF 500,000,000
6,000,000 shares	CHF 550,000,000

Because the articles of association of Y AG provide for voting shares[1], the total number of voting rights for this company therefore amounts to 6,000,000.

Shareholder Z, who did not previously hold any Y AG shares or equity derivatives, purchases 200,000 registered shares as well as 500 call options that grant the holder the right to acquire 50,000 bearer shares.

The voting rights can now be calculated as follows:

$$\frac{\text{Number of voting rights purchased x 100}}{\text{Total number of voting rights as shown in the Commercial Register}} = \frac{250{,}000 \text{ x } 100}{6{,}000{,}000}$$

= 4.17% of the voting rights for Y AG

Because the statutory threshold of 3% of the voting rights has been exceeded, this purchase triggers the obligation to notify in accordance with the FMIA.

[1] see Art. 693 CO

21.2.5 Duty to inform

A company (issuer) that receives a corresponding disclosure notification has a publication obligation. It is required to publish the information notified to it within two trading days.

FMIA Art. 124

The SIX Swiss Exchange Disclosure Office has provided an electronic publication platform for this purpose in accordance with Art. 25 FMIO-FINMA.

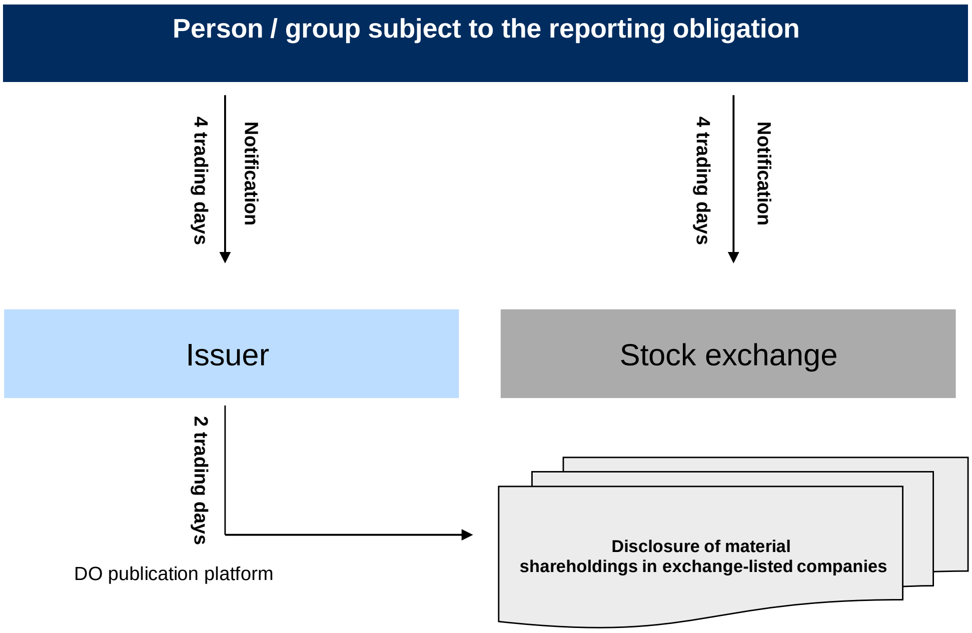


Figure: Obligation to provide information to the issuer and the stock exchange

FMIA Art. 121

21.2.6 Notification duty for organised groups

A group organised pursuant to an agreement or otherwise must comply with the notification duty laid down in Article 120 as a group and shall disclose:

- its total holdings;
- the identity of its members;
- the nature of the agreement;
- the representation.

Remark

There is no notification duty, if a threshold is temporarily achieved, exceeded or fallen below during a trading day.

21.2.7 Breaches of disclosure obligations

FMIA Art. 122

Where there are grounds for suspecting a breach of a disclosure obligation, the issuer and SIX Swiss Exchange are obliged to inform FINMA.

FINMA must notify any breaches of disclosure obligations of which it becomes aware to the Federal Department of Finance, which will make a determination on the matter and initiate any law enforcement proceedings.

21.2.8 Criminal sanctions

FMIA Arts. 144, 151

Where a breach of a disclosure obligation has been committed, criminal sanctions may be imposed. In the case of a deliberate breach of the reporting obligation in respect of a listed company, a fine not exceeding CHF 10 million may be imposed.

In **cases of negligence**, the maximum fine is CHF 100,000. In addition, voting rights may be suspended and individuals prohibited from acquiring further shares in a company.

21.3 Public takeover offers

FMIA Art. 125 ff.

Public takeover offers mean any offer to purchase or exchange shares, participation or profit-sharing certificates or any other equity securities which is made publicly to the holders of shares or other equity securities of Swiss companies whose equity securities are, in whole or in part, listed on an exchange in Switzerland.

21.3.1 Objective and purpose

The rules on public takeover offers are aimed at ensuring the integrity and transparency of the market as well as the equal treatment of investors in the event of corporate takeovers.

21.3.2 The obligation to make an offer

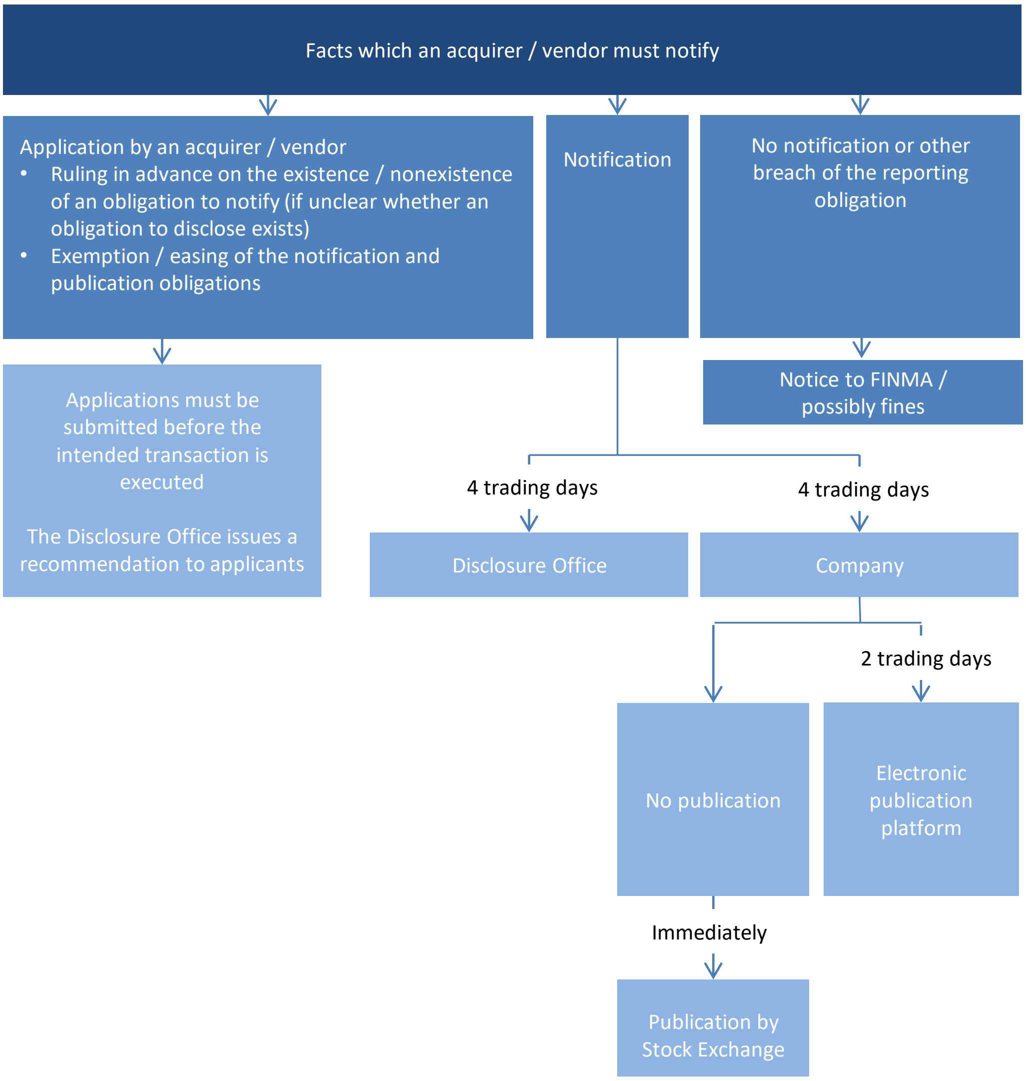
FMIA Arts. 135, 136

Whosoever, directly, indirectly or acting in concert with third parties, acquires equity securities which, added to equity securities already owned, exceed the **threshold of $33^1/_3$** percent of the voting rights of an offeree company, whether or not such rights may be exercisable, is under an obligation to make an offer to acquire all listed equity securities of the company. In certain circumstances, this rule may force a potential purchaser to acquire the entire company rather than just a controlling interest.

The Takeover Board (TB) may, for example, permit exemptions from the obligation to make an offer in the following circumstances:

- where the transfer of voting rights occurs within a group organised pursuant to an agreement or otherwise (investor pools, families)
- where the threshold is exceeded as a result of a decrease in the total number of voting rights of the company
- where the threshold is exceeded only temporarily
- in certain situations related to corporate reorganisations (which may be limited in time)
- in the case of a firm commitment underwriting of share issues
- where the equity securities have been acquired as a result of the devolution or partition of an estate, a donation, matrimonial property regime, or execution proceedings

21.3.3 Overview of disclosure and publication procedures



22 Penalties and sanctions

22.1 Legislation and provisions

The main focus of legislative provisions and rules is to protect investors and the market. The following issues are explicitly addressed:

- Insider trading
- Price and market manipulation

22.2 Basic principles

Insider trading is defined as when a person uses information to their own advantage or to the advantage of a third party. Market manipulation (or price manipulation) involves influencing prices by providing misleading information and/or executing fictitious transactions. Insider trading and market manipulation are banned because they negatively impact market equilibrium and trust in the markets. Insider trading bans, market manipulation bans and ad hoc publicity complement each other. In the event of a breach, it is often the case that multiple rules are broken.

The problem here is caused by circular processes: With insider trading, the price does not reflect the mutual expectations of the parties to a transaction as there is an information imbalance. The insider can therefore use this to their advantage, while the outsider will be disadvantaged by the transaction; this distorts the price signal. The fact that an insider does not use a piece of information in the interest of the company, but circularly in their own interest, causes further damage to the company's reputation and development. Thirdly, insider trading and market manipulation can trigger self-reinforcing price trends, which undermines the integrity of the information processes.[2]

§

- **Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Act, FMIA), Articles 142, 143, 154, 155.**
- **FINMA Circular 2013/08 "Supervisory rules for market conduct in securities trading" sections III – V of**

Purpose
Fair and transparent trading involves market participants having trust in other market participants. This requires having a solid set of instruments to prevent market manipulation and insider trading, and sanctioning any breaches of these. In Switzerland, FINMA and the Office of the Attorney General of Switzerland are authorized to carry out proceedings in this regard.

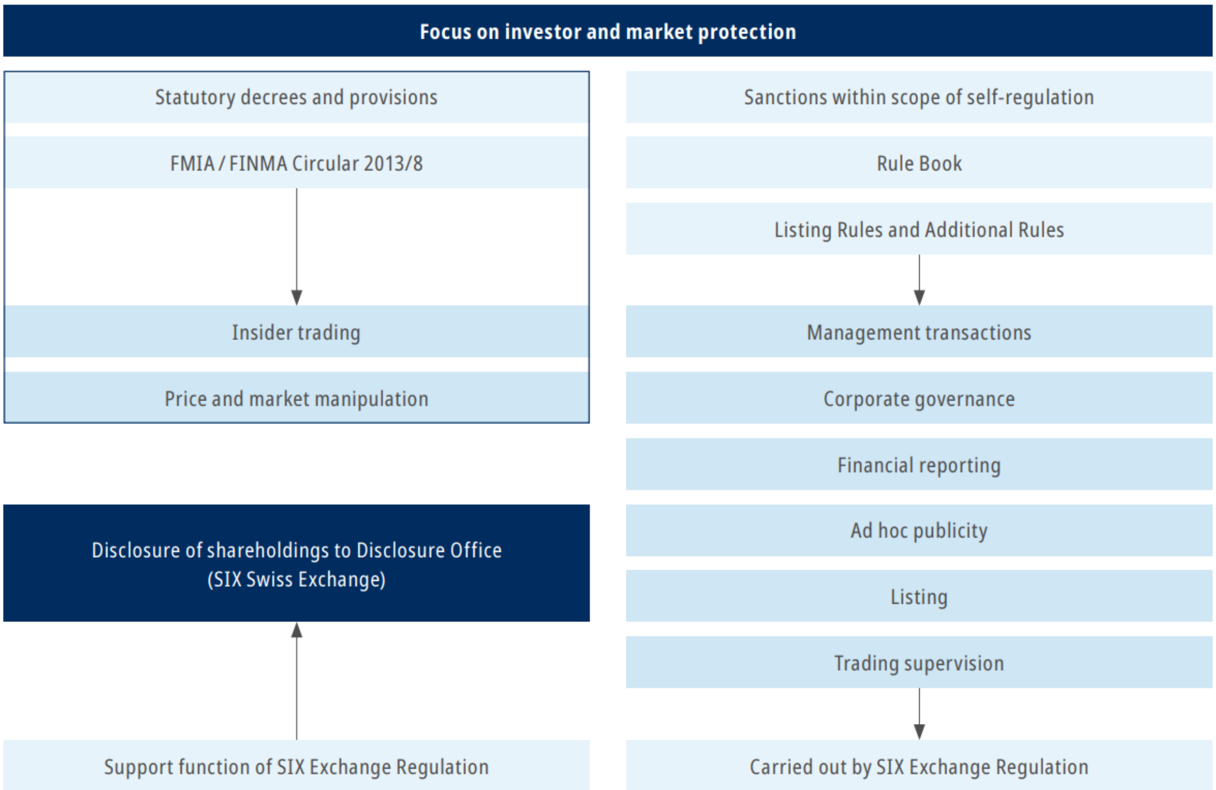
Insider information is confidential information, which if disclosed, would have a significant impact on the price of a security. FINMA investigates suspicions of criminal activity and prosecutes them with law enforcement agencies – in Switzerland, the Office of the Attorney General. The latter has effective instruments at its disposal and if there is sufficient evidence, it is authorized, for example, to search company premises and access mobile phone and computer records. Sanctions range from bans on practicing a profession, fines and custodial sentences of up to five years. Situations that are critical from a company's perspective include takeover situations and communication with significant shareholders (closely connected to the company). Special care is also required in the event of block

[2] Dedeyan, Daniel, Regulierung der Unternehmenskommunikation – Aktien- und Kapitalmarktrecht auf kommunikationstheoretischer Grundlage, Zürich: Schulthess: 2015, 797-885.

trades, trading in own shares or share buy-backs. The legal rules are defined relatively broadly and in individual cases, circumstantial evidence can be enough to secure a conviction.

Legal basis

In this chapter, we will look more closely at the topic of insider trading and price manipulation. Unlike sanctions within the scope of self-regulation (e.g. ad hoc publicity and management transactions), insider trading and price manipulation is based on certain legal ordinances and provisions.



22.3 Insider trading and price manipulation

FINMA Circular 2013/08

Insider trading and price manipulation are prohibited under FMIA. Further relevant information can be found in sections III – V of FINMA Circular 2013/08 "Supervisory rules for market conduct in securities trading".

22.3.1 Exploiting knowledge of confidential facts (insider trading)

The applicable provisions of FMIA are aimed at preventing insider dealing. These provisions are primarily designed to promote equality of opportunity for investors.

FMIA Art. 142

Art. 142 FMIA Exploitation of insider information

1 Any person who has insider information and who knows or should know that it is insider information or who has a recommendation that he or she knows or should know is based on insider information shall behave inadmissibly when he or she:

a. exploits it to acquire or dispose of securities admitted to trading on a trading venue in Switzerland
or to use financial instruments derived from such securities;
b. discloses it to another;
c. exploits it to recommend to another to acquire or dispose of securities admitted to trading on a
trading venue in Switzerland or to use financial instruments derived from such securities.

2 The Federal Council shall issue provisions regarding the admissible use of insider information, in particular in connection with:

a. securities transactions in preparation of a public takeover offer;
b. a special legal status on the part of the recipient of the information.

FMIA Art. 154

Art. 154 FMIA Exploitation of insider information

1 A custodial sentence not exceeding three years or a monetary penalty shall be imposed on any person who as a body or a member of a managing or supervisory body of an issuer or of a company controlling or controlled by them, or as a person who due to their holding or activity has legitimate access to insider information, if they **gain a pecuniary advantage** for themselves or for another with insider information by:

a. exploiting it to acquire or dispose of securities admitted to trading on a trading venue in Switzerland or to use derivatives relating to such securities;
b. disclosing it to another;
c. exploiting it to recommend to another to acquire or dispose of securities admitted to trading on a trading venue in Switzerland or to use derivatives relating to such securities.

2 Any person who through an act set out in paragraph 1 gains a **pecuniary advantage** exceeding one million francs shall be liable to a custodial sentence not exceeding five years or a monetary penalty.

3 Any person who gains a **pecuniary advantage** for themselves or for another by exploiting insider information or a recommendation based on insider information disclosed or given to them by a person referred to in paragraph 1 or acquired through a felony or misdemeanour in order to acquire or dispose of securities admitted to trading on a trading venue in Switzerland or to use derivatives relating to such securities shall be liable to a custodial sentence not exceeding one year or a monetary penalty.

4 Any person who is not a person referred to in paragraphs 1 to 3 and yet who gains a **pecuniary advantage** for themselves or for another by exploiting insider information or a recommendation based on insider information in order to acquire or dispose of securities admitted to trading on a trading venue in Switzerland or to use derivatives relating to securities shall be liable to a fine.

In summary, anyone who procures a financial benefit for himself or another by exploiting confidential information, which if known, would be likely to have a significant effect on the prices of certain securities, is deemed to be engaging in insider dealing. Potential offenders include anyone who has knowledge of insider information. There are varying degrees of penalty depending on the reasons why a person has insider information and different penalties for primary and secondary insiders and other persons.

Types of insider:

Primary insiders	1. Member of a management or supervisory body 2. Person who has access to insider information by reason of their ownership interest or function **Penalty**: Term of imprisonment • not exceeding 5 years if the financial benefit > CHF 1 million (aggravated primary insider offence) • up to 3 years in other cases
Secondary insiders	1. Persons to whom insider information has been disclosed by a primary insider (e.g. journalists) 2. Persons who have obtained information by committing a crime or lesser indictable offence **Penalty**: Term of imprisonment not exceeding 1 year or fine
Other persons	Opportunistic insiders (e.g. cleaning staff) **Penalty**: Fine

Scope of protection

Scope of protection	Integrity of exchange trading
	Equal opportunity for investors

Definition of confidential, price-sensitive facts

Definition of confidential, price-sensitive facts	**Confidentiality**	The relevant information is only known to a limited number of individuals. It cannot be accessed by outsiders.
	Facts	The information relates to a fact that is to a large extent established and true.
	Price-sensitive	The information relates to circumstances that are capable of materially influencing the market price of securities.

22.3.2 Price manipulation

The principal aims of Articles 143 and 155 FMIA are to preserve investors' trust in a capital market that is fair, undistorted and affords equal opportunity.

FMIA
Art. 143

Art. 143 FMIA Market manipulation

1 A person behaves inadmissibly when he or she:

a. publicly disseminates information which he or she knows or should know gives false or misleading signals regarding the supply, demand or price of securities admitted to trading on a trading venue in Switzerland;
b. carries out transactions or acquisition or disposal orders which he or she knows or should know give false or misleading signals regarding the supply, demand or price of securities admitted to trading on a trading venue in Switzerland.

2 The Federal Council shall issue provisions regarding admissible conduct, in particular in connection with:

a. securities transactions for price stabilisation purposes;
b. buyback programmes for a company's own securities.

FMIA
Art. 155

Art. 155 FMIA Price manipulation

1 A custodial sentence not exceeding three years or a monetary penalty shall be imposed on any person who substantially influences the price of securities admitted to trading on a trading venue in Switzerland with the intention of gaining a **pecuniary advantage** for themselves or for another if they:

a. disseminate false or misleading information against their better knowledge;
b. effect acquisitions and sales of such securities directly or indirectly for the benefit of the same person or persons connected for this purpose.

2 Any person who through activities set out in paragraph 1 gains a pecuniary advantage of more than one million francs shall be liable to a custodial sentence not exceeding five years or a monetary penalty.

Scope of protection

Scope of protection	Preserving market participants' trust in a capital market that is fair, undistorted and affords equal opportunity.
	Protecting the assets of market participants that could be adversely affected by price manipulation

Different types of conduct constituting the offence

Dissemination of misleading information	Fictitious trades
Deliberate dissemination of misleading information	Influencing market prices by giving a false or misleading impression of supply and demand
False statements on market-related facts	Purchases and sales of securities between de facto identical parties at a fictitious price that differs from the market price
Withholding information on market-related matters (duty of disclosure)	Engaging in fictitious transactions on and off the exchange in listed securities
Knowingly making false forecasts, where the expertise or position of the individual concerned makes him appear especially qualified to make the forecast	
Inaccurate information in issue prospectuses or in relation to public takeover bids	
Failing to discharge "ad hoc publicity" obligations with intent to deceive	

Where the offender secures a financial benefit in excess of CHF 1 million, the offence is defined as aggravated. An aggravated criminal offence is deemed to have been committed, which thus qualifies as a predicate offence to money laundering.

It is important to differentiate between price manipulation and market manipulation. Market manipulation is not covered by the penal provisions of FinIA but is governed by regulatory rules, with the result that administrative penalties rather than criminal penalties are imposed. There is no presumption of subjective fault or acting with intent to confer unjust enrichment.

Criminal law	Regulatory rules
Price manipulation under Art. 155 FMIA • Wilfully disseminating false or misleading information • Fictitious trades • Intention of exerting significant influence on prices	Market manipulation under Art. 143 FMIA • Disseminating false or misleading information on circumstances of substantial importance for the valuation of a security. • Disseminating false or misleading information, rumours or messages, that are capable of influencing securities prices in order to exploit the resulting price movement. • Giving false or misleading signals with regard to supply, demand or the price of securities (see also FINMA Circular 2013/08 – Market conduct rules)

Price stabilisation

Price stabilisation, by contrast, is not generally deemed to be an offence ...	
Price stabilisation	Support purchases are undertaken in an attempt to stabilise the market price of the relevant securities and potentially prevent a price collapse. Because support purchases are costly, which means the party stabilising the prices generally incurs direct financial loss, it is not possible to demonstrate any unlawful gain. Moreover, the practice does not involve either misleading information or purchases/sales, where the purchase and sale was entered into for the account of the same person. The criminal offence of price manipulation pursuant to Art. 155 FMIA does therefore not apply to such price-stabilising transactions.

22.4 Sanction proceedings in the context of self-regulation

Procedure for investigating and imposing sanctions in respect of breaches of the following rules and related implementing rules of the exchanges that are regulated by the regulatory bodies of SIX Group Ltd:

- The Rule Book of SIX Swiss Exchange
- Listing Rules (LR) and Additional Rules.

Only those sanctions which are contained in the Rule Book or the LR and the Additional Rules will be imposed, and only against individuals or legal entities which are subject to the relevant rules and regulations (the "Party/Parties Concerned").

Any conflicts of interest affecting individuals within the investigative bodies must be reported immediately. Recusal may be declared by the persons involved in the sanction proceedings or demanded by those involved in the proceedings.

The investigative bodies may terminate sanction proceedings by entering into an agreement with the Party Concerned (amicable agreement). Agreements are permitted in trivial cases or to expedite proceedings. Agreements must be published.

22.4.1 SIX Swiss Exchange investigative bodies

The Surveillance & Enforcement department of SIX Exchange Regulation is responsible for investigating breaches of the Rules Books of SIX Swiss Exchange Ltd and the related implementing rules.

The Listing & Enforcement of SIX Exchange Regulation is responsible for investigating breaches of the Listing Rules, the Additional Rules and the implementing regulations.

Unless these Rules stipulate otherwise, sanctions will be imposed by the Sanctions Commission.

22.4.2 Surveillance & Enforcement proceedings

SVE consists of two departments:

- Markets Supervision & Investigations (MSI)
- Enforcement & Compliance (ENC)

MSI carries out the "investigative" function, ENC the "prosecutorial" function.

Markets Supervision & Investigations (MSI)

Markets Supervision & Investigations (MSI) is responsible for overseeing trading on SIX Swiss Exchange in respect of compliance with

- trading-specific rules
- the provisions of stock exchange legislation
- the provisions of criminal law

Enforcement & Compliance (ENC)

The activities of Enforcement & Compliance (ENC) comprise:

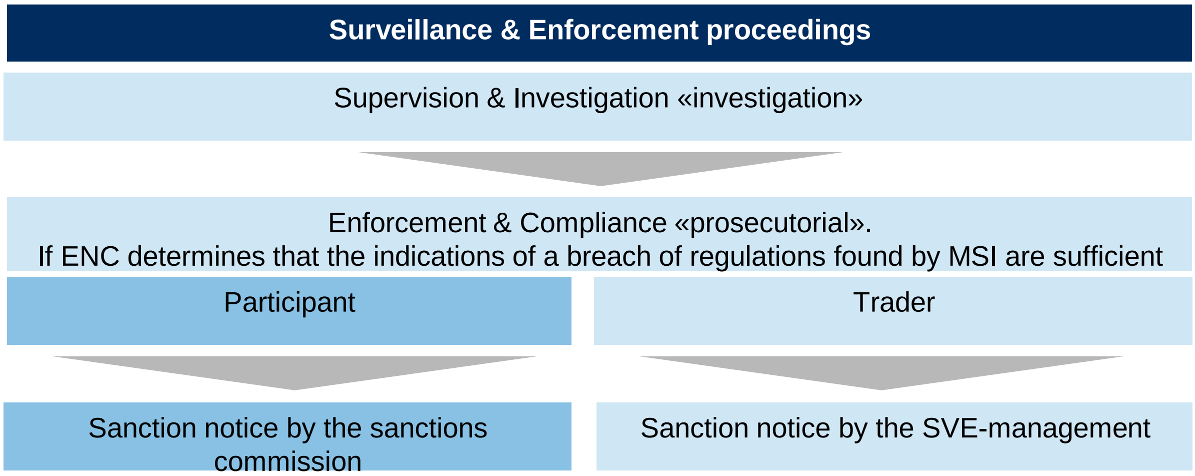
- Carrying out sanctions proceedings against participants and traders. Applying to the Sanctions Commission in the case of participants or to SVE Management in the case of traders for commencement of sanctions proceedings.
- Preparing the audit programme for the audit of participants of SIX Swiss Exchange, processing the audit reports received and initiating any action that may be required as a result
- Providing legal assistance and advice to SVE during investigations
- Processing appeals from participants and third parties

Surveillance & Enforcement proceedings

In the context of a preliminary investigation, Surveillance & Enforcement will examine whether or not sufficient indications exist to conduct a formal investigation.

If ENC determines that the indications of a breach of regulations found by MSI are sufficient, an investigation is initiated. The Parties Concerned (i.e. the participant and in some cases also its traders) will be informed in writing that an investigation has been initiated. No appeal may be lodged against the initiation of an investigation.

During the investigation, Surveillance & Enforcement will ascertain the facts of the matter to the extent necessary to justify a sanction notice or a proposal to the Sanctions Commission. The Parties Concerned (the participant and in some cases also its traders) will have the opportunity during the investigation to state its/their position in writing.



22.4.3 Conclusion of the investigation

An investigation by the executive bodies concludes with the stay of the proceedings or upon an agreement, the issue of a sanction notice or the lodging of a proposal for sanctions with the Sanctions Commission.

22.4.4 Sanction notices by investigative bodies

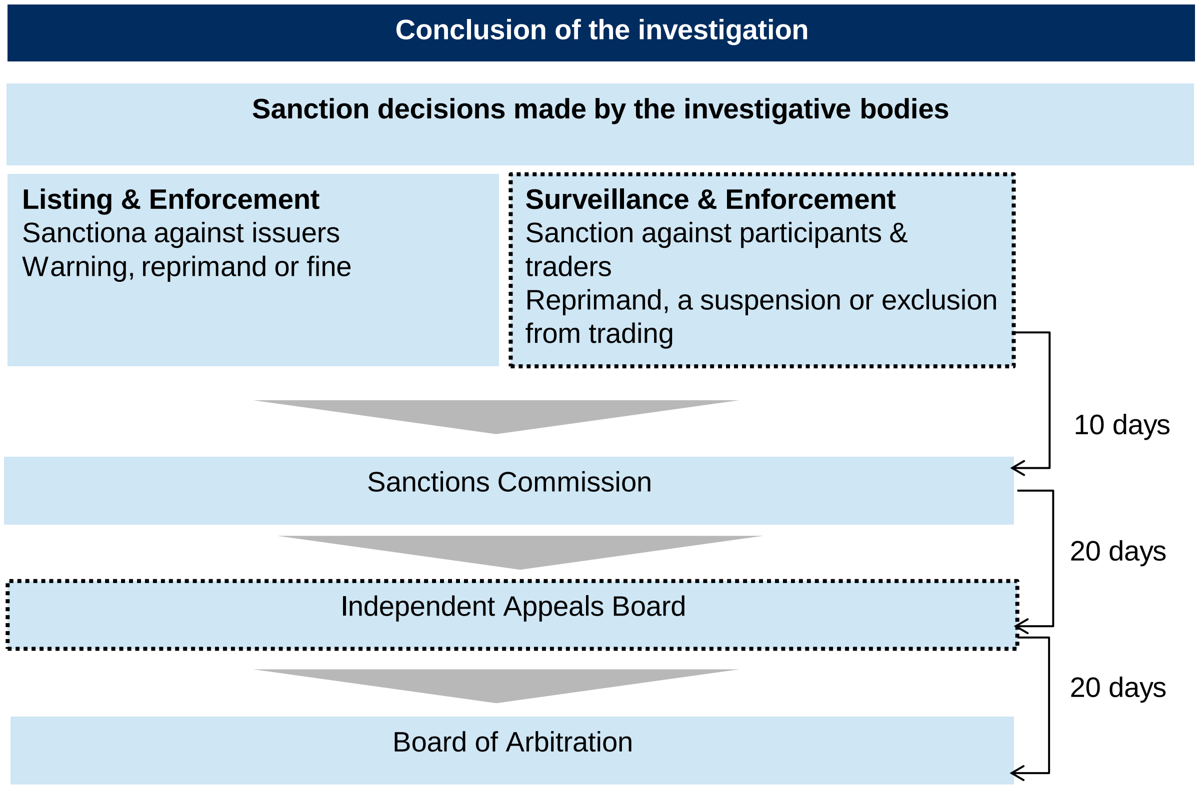
Surveillance & Enforcement may issue a sanction notice against a trader employed by a participant if the sanction takes the form of a reprimand, a suspension or exclusion from trading.

Listing & Enforcement may issue a sanction notice for a violation of the rules if possible sanctions include a warning, reprimand or fine.

The Party Concerned may lodge an appeal with the Sanctions Commission against investigative body sanction notices within ten trading days. The appeal must be substantiated after a deadline has been set by the President of the Sanctions Commission.

22.4.5 Sanctions Commission decisions

Under Art. 37 FMIA, the Parties Concerned may challenge decisions by the Sanctions Commission regarding the exclusion of participants and traders, as well as the delisting or suspension of securities by submitting an appeal to the Appeals Board within 20 trading days of receiving the decision in question. The appeal must be substantiated. Where all other Sanctions Commission decisions are concerned, the Party Concerned may lodge an appeal with the Board of Arbitration within 20 business days of receiving the decision in question. The complaint must be pleaded.


Conclusion of the investigation
Sanction decisions made by the investigative bodies
Listing & Enforcement
Sanctiona against issuers
Warning, reprimand or fine
Surveillance & Enforcement
Sanction against participants & traders
Reprimand, a suspension or exclusion from trading
10 days
Sanctions Commission
20 days
Independent Appeals Board
20 days
Board of Arbitration

22.5 Sanctions

22.5.1 Sanctions against participants and traders

RB
Clause. 21

Measures against participants (sanctions imposed by the Sanctions Commission)	Measures against traders (sanctions delegated to SVE)
Reprimand of participant	Reprimand of trader
Suspension of participant	Suspension of admission of a registered trader to trade on SIX Swiss Exchange
Exclusion of participant	Revocation of admission (exclusion) of a registered trader to trade on SIX Swiss Exchange
Imposition of fines (contractual penalties) of up to CHF 10 million	

RB
Clause. 8.1

22.5.2 Suspension of participation

The Exchange may, at any time, block a participant's access to the exchange system and/or delete its orders. Participation is suspended in the following situations:

- the participant fails to comply with the rules of the Exchange or those of a central counterparty;
- the participant is unable to conduct its business properly;
- the participant defaults on payments connected to monetary claims by the Exchange or the central counterparty against the participant, or if insolvency is threatened or has already occurred;
- debt restructuring, composition or liquidation proceedings are instigated against the participant, or criminal proceedings commenced against the participant or one of its senior bodies;
- the participant does not use the exchange system for a considerable period of time;
- participants can also be suspended as part of sanction proceedings.

When necessary, the Exchange may publicly announce the suspension of participation and name the participant concerned.

22.5.3 Information for the general public

The sanction decisions are published on the SIX Exchange Regulation website on an ongoing basis:

The following special features apply:

Surveillance & Enforcement

Surveillance & Enforcement may publish sanction notices that have acquired legal force.

Listing & Enforcement

Listing & Enforcement will inform the public of the initiation of an investigation, unless this is prohibited by some other rule or regulation. The Party Concerned will be informed in advance. The sanction notice will generally be made available on the SIX Exchange Regulation website in anonymised form.

Sanctions Commission

The Sanctions Commission will publish sanction decisions that have acquired legal force. The sanction notice will generally be made available on the SIX Exchange Regulation website in anonymised form.

22.5.4 Termination of participation

The participant or the Exchange may terminate the participation agreement at any time subject to a notice period of four weeks, effective at the end of a month. The right to exclude a participant in connection with sanction proceedings remains reserved. Termination results in the cancellation of the participation agreement. Regardless of such termination, the participant must continue to fulfil all of its obligations to SIX companies. The Exchange will publicly announce the termination of a participant's participation.

23 Liability

23.1 Liability of the Exchange

RB Clause 6.1 Liability of the Exchange

With the exception of intent and gross negligence on the part of its bodies or employees, the Exchange shall not be liable for the loss or damage that a participant, its clients or third parties might sustain from actions or omissions by the Exchange. For example, the Exchange shall not be liable for any loss or damage attributable to:

- the full or partial unavailability of the exchange system, the clearing and settlement infrastructure or other technical problems;
- incorrect or incomplete data processing or distribution;
- the rejection of a trade by a central counterparty.

The Exchange shall accept no liability for claims extending beyond direct losses, for example compensation for indirect losses or consequential losses such as lost profit or additional expenses.

23.2 Liability of participants

Participants are liable for all actions and omissions of their internal bodies, employees and agents and any actions and omissions on the part of their DEA clients.

The participant is required to take the necessary precautions to prevent loss. Specifically, it must have appropriate systems, controls and processes to monitor trades and transaction processing and to reduce potential risks.

24 Contact

24.1 SIX Swiss Exchange Member Education

Member Education
Helpdesk

T +41 58 399 30 99
education@six-group.com

24.2 Specific Helpdesks

Member Services provides support throughout the entire process of connecting to the exchange and offers guidance to trading participants and clearing and reporting members with regard to clearing and settlement and trader administration.

Member Services
Helpdesk

T +41 58 399 2473
member.services@six-group.com

Exchange Operations
Helpdesk

T +41 58 399 2475
helpdesk.exc@six-group.com

Technical Product Support (TPS) has offices in Zurich, Geneva and London to support you with all your **technical queries** - in various languages and on site at your office if required.

Technical Product Support	Zurich T +41 58 399 2400 lsz@six-group.com
Technical Product Support	Geneva T +41 58 399 5642 lsg@six-group.com
Technical Product Support	London T +44 207 864 4364 lsl@six-group.com

25 Sources

[Trading Rules]

[Listing Rules]

[Reporting Office Rules]

[Directives]

26 Glossary

Term	Explanation
ASP	Application Service Provider
CLOB	Central Limit Order Book
CFI Code	Classification of Financial Instruments Code
DP	Delayed Publication
DM	Deferred Publication
ETFs	Exchange Traded Funds
ETPs	Exchange Traded Products
ETSFs	Exchange Traded Structured Funds
FINMA	Swiss Financial Market Supervisory Authority
FIX	Financial Information Exchange Protocol
FinIA	Federal Act on Financial Institutions
FinIO	Financial Institutions Ordinance
FMIA	Federal Act Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading
FMIO	Federal Ordinance on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading
FTPS	FIX Transactions (Orders) per Second (interface: STI)
GUI	Graphical User Interface
IBL	Internet Based Listing
IMI	ITCH Market Data Interface
IOC order	Immediate-Or-Cancel Order
LR	Listing Rules
LO	Limit Order
QDM	Quote-Driven-Market
MMT	Market Model Typology
MO	Market Order
MPOB	Mid-Point Order Book
MR	Mistrade Reversal
OBM	On-Book Matcher
OTI	OUCH Trading Interface (OTI)
OPS	Orders per Second
OTPS	OUCH transactions (orders) per second (OTI Interface)
PBBO	Primary Best Bid Offer

PVM	Price Validation Market
PTP	Post-Trade Processor
QS	Quote System
QU	Quote
QPS	Quotes per Second (QTI Interface)
QTI	Quote Trading Interface
RDI	Reference Data Interface
RT	Reported Trade
SA	Sponsored Access
SCAP	SIX Swiss Exchange Common Access Portal
SMIM	SMI Mid-Cap Segment
SMR	SWXess Maintenance Release
SSX	SIX Swiss Exchange
StGB	Swiss Penal Code
STI	Standard Trading Interface
SVE	Surveillance & Enforcement
SWX	Former Name of SIX Swiss Exchange
SWXess	SIX Swiss Exchange Trading Platform
TAL	Trading-At-Last
TC	Trade Confirmation
TDM	Trade Data Monitor
TR	Trade Reversal
TRI	Transaction Report Interface
TRR	Trade Report
TTR	Trade and Transaction Reporting
VWAP	Volume Weighted Average Price
X-stream INET	NASDAQ OMX Trading Technology