Directive 3: Trading

SDX Trading Ltd

of 29 November 2021

Entry into force: 1 December 2021

Content

1 Purpose and Principle

This Directive contains provisions for on-exchange trading and is based on Clause 10 Trading Rules.

I. General

2 Trading Day and Trading Period

[1] The Exchange specifies the trading days in the trading calendar and publishes these in a suitable way.

[2] A trading day shall consist of the following trading periods:

    a)   pre-opening;

    b)   opening;

    c)   open order book;

    d)   close of trading with or without closing auction;

    e)   post-trading.

[3] A trading day shall last from 06:00 to 22:00 (CET).

[4] In special situations the Exchange may modify trading days.

3 Settlement Day

The settlement day is determined by the settlement organisation of SIX Digital Exchange Ltd. The trading hours in accordance with Clause 4 below have been set within the settlement day.

4 Trading Hours

[1] Trading hours are defined for each trading segment.

[2] In special situations the Exchange may modify trading hours.

[3] The details are laid down in the "Trading Parameters" Guideline.

II. Definitions

5   Order and Quote

5.1   Order

5.1.1   Definition

[1] In accordance with Clause 10.2 Trading Rules, an order is a binding offer to buy or sell a certain quantity of a security at an unlimited or limited price.

[2] Orders may be entered in or deleted from the order book during set periods. All incoming orders shall be assigned a time stamp and an identification number. Amended orders shall lose their original time priority and be given a new time stamp.

5.1.2   Orders

An order may be entered at any time during the trading day and is visible in the order book. Non-executed parts of the order remain in the order book until they have been executed or deleted, or have expired. Other order specifications remain reserved.

5.1.3   Order Specification

[1] An order must be recorded with the following attributes:

   a)   Identification of the participant: participant identification (Party ID) and Trader ID;

   b)   Transaction type: buy or sell;

   c)   Trading capacity: client transaction (trading in own name but for the account of the client) or proprietary transaction (trading in own name and for own account);

   d)   Identification of the security: ISIN, trading currency and trading venue;

   e)   Order volume: number of securities or nominal value for percent-listed instruments.

   f)   Price limit: limited or unlimited;

   g)   Order specifications:

      1.   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;

      2.   At-the-close: May only be entered before the closing auction. Non-executed parts of the order shall be deleted after the closing auction. Orders with the order specification at-the-close are not visible in the order book until the start of the closing auction;

      3.   Good-for-day: valid until the close of trading on the current trading day;

      4.   Good-till-date: valid until the close of trading on a certain trading day. The maximum term of validity shall be one year.

h)   Algorithmic trading: flagging of

   1.   the order generated by algorithmic trading;

   2.   the algorithm used;

   3.   the trader initiating the order.

[2] Details are laid down by the Exchange in the relevant technical specifications.

5.2   Quote

5.2.1   Definition

Quote specifies the simultaneous entry of one or more limited buy and/or sell orders in a single instruction. It shall remain in the order book until it is executed, overwritten or deleted.

5.2.2   Quote Specification

[1] A quote must be recorded with the following attributes:

a)   Identification of the participant: participant identification (Party ID) and Trader ID;

b)   Transaction type: buy and/or sell;

c)   Trading capacity: client transaction (trading in own name but for the account of the client) or proprietary transaction (trading in own name and for own account);

d)   Identification of the security: ISIN, trading currency;

e)   Quote volume: number of securities or nominal value for percent-listed instruments for buy and/or sell;

f)   Price limit: limited;

g)   Order specification: Good-for-day: valid until the end of the current trading day;

h)   Algorithmic trading: flagging of

   1.   the order generated by algorithmic trading;

   2.   the algorithm used;

   3.   the trader initiating the order.

[2] Details are laid down by the Exchange in the relevant technical specifications.

6   Price-Time Priority

The price-time priority principle means that the order or quote 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 received first shall also be executed first.

7   Open Order Book

[1] The open order book for the trading period lists the incoming orders or quotes that match with orders or quotes on the other side of the order book and lead to a situation that can be executed; this does not immediately lead to a trade, and instead triggers an auction's call phase.

[2] The following rules shall apply:

a)   An incoming order or quote shall be checked for feasibility and whether it is consistent with the price levels in the order book;

b)   if a limited order is not or is only partially executed in an auction, it shall be placed in the order book with its limit and time stamp. Other order validities remain reserved;

c)   If an unlimited order is not or is only partially executed, it is placed in the order book with a time stamp if it has neither expired nor been withdrawn.

[3] The Exchange may provide self-match prevention in certain trading segments to avoid triggering auctions unnecessarily. At the request of the participant, opposite buy and sell orders or quotes under their own participant identification (Party ID) which are flagged as nostro transactions do not trigger auctions. The Exchange will delete the order or quote with the older time stamp from the order book, irrespective of the order type or quantity.

[4] The details are laid down in the "Trading Parameters" Guideline.

8   Auction and Principle of Highest Executable Volume

[1] During the call phase, the participant may enter new orders or quotes in the order book or delete existing ones without executions coming about. Orders and quotes are finally combined after the end of the auction's call phase. Final execution in the order book is dependent on the settlement of combined orders or quotes and is not communicated until settlement has been confirmed.

[2] The following rules shall apply to the performance of auctions:

a)   The orders in an auction already finally combined cannot expire or be deleted or modified while the final combination of orders and the settlement process are still running. However, the orders in an auction that have not yet been finally combined can still be deleted or modified;

b)   The length of the call phase before the auction can vary based on the trading segment of the respective instrument. After a minimum length of time, the call phase will be extended by an unspecified length of time (this unspecified length of time will at least be shorter than the call phase);

c)   The Exchange reserves the right to extend the call phase if the auction's theoretical execution price deviates from the reference price by a specific amount (reference price collar, see "Trading Parameters" guideline);

d)   The Exchange reserves the right to extend the call phase of the auction if the auction's theoretical execution price results in mistrades in accordance with Clause 6 of the "Market Control" Directive.

e)   If a contingently concluded trade arising from an order or quote cannot be settled in conjunction with the final combination of an auction's orders, the final combination of orders in this auction is not finalised and none of the contingently concluded trades of the auction can be finalised;

f)   The orders causing settlement failure due to uncovered participant holdings either on securities or cash are removed from the order book. Also, the Exchange may remove all of a participant's orders on one or both sides of the book if it deems this to be necessary to safeguard trading. If there are still orders in the book that allow a situation that can be executed, this results in an auction.

[3] The price of the auction shall be determined taking into account all limited and unlimited orders and quotes in the order book and, in certain cases, by the reference price. Orders and quotes shall be treated equally in the auction.

[4] According to the principle of highest executable volume the largest possible quantity of orders and quotes shall be executed at a single price specified in the auction. The following rules shall apply:

a)   orders shall be considered in accordance with the price-time priority principle;

b)   unlimited orders shall be executed with limited and unlimited orders on the opposite side.

c)   first unlimited and then limited orders shall be executed until one side of the book is empty or the best purchase price remaining in the order book is lower than the best sale price;

d)   if two unlimited orders of the same quantity are executed last, the price of the auction shall correspond to the reference price. If the reference price is lower (higher) than the best purchase order (sell order) remaining in the book, this remaining order shall determine the price of the auction;

e)   if one unlimited and one limited order are executed last, the price of the auction shall correspond to the remaining limit;

f)   if limited orders of different quantities are executed at two price levels last, the price of the auction corresponds to the price level of the larger order quantity;

g)   if limited orders of equal quantities are executed at two price levels last, the price of the auction shall correspond to the arithmetic mean of both price step, rounded up to the next valid price level. If the arithmetic mean is lower (higher) than the best purchase order (sell order) remaining in the book, this shall determine the price of the auction;

h)   the Exchange shall calculate the theoretical opening price of the auction during the call phase and publish it on an ongoing basis.

[4] The price for all trades in the auction shall be determined by the last price establishment in accordance with the rules of this Clause.

[5] The details are laid down in the "Trading Parameters" Guideline.

9   Algorithmic Trading

[1] 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; 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 that can be entered into the system by a participant;

      2.   slow down the flow of orders if there is a risk of the capacity of the system being reached; and

      3.   limit and enforce the minimum tick size that may be executed on the Exchange.

[2] 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.

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

10   Pre-trade Controls

[1] The Exchange may reject orders and quotes which exceed predetermined volume and price thresholds (pre-trade controls), in particular where:

    a)   the price limit of the incoming order or quote reaches or exceeds the upper price range (reference price multiplied by the Price Collar Factor) for the security;

    b)   the price limit of the incoming order or quote reaches or falls short of the lower price range (reference price divided by the Price Collar Factor) for the security;

    c)   the value of the incoming order or quote reaches or exceeds the Maximum Order Value (the order volume multiplied by the price limit for the order) for the security; or

    d)   the volume of the incoming order or quote reaches or exceeds the Maximum Order Volume (maximum order value divided by the reference price) for the security.

[2] The Price Collar Factor used to calculate the price range, as well as the Maximum Order Value in Swiss francs, are determined by the Exchange for each trading segment. The details are laid down in the "Trading Parameters" Guideline.

[3] The reference price of the previous trading day is used to determine the pre-trade controls.

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

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

11   Reference Price Adjustment

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

    a)   If there is no trade on the Exchange in the order book during trading hours, despite an open order book. The Exchange adjusts the reference price after the close of trading based on the most recent bid and ask price before the close of trading. 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, one hour before the close of trading, there is no bid price and no ask price in the order book, the reference price shall not be adjusted;

    b)   If the trade which resulted in the reference price has been cancelled by the Exchange. The reference price shall be adjusted after the close of trading. If there has been no valid on-exchange, on-order-book trade during trading hours, the reference price shall be determined pursuant to Clause 11 para. 1 lit. a above;

    c)   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;

d)   If the price steps for a security are modified. The Exchange shall adjust the reference price prior to the opening of trading if the reference price does not correspond to the newly valid price steps.

[2] Further manual adjustments to the reference price remain reserved.

III.   Market Model "Auction Model"

12   Auction Model

12.1   Orders and Quotes

[1] In addition to orders, quotes are also permitted depending on the trading segment.

[2] In trading segments that support the entry of quote, the auction model treats orders and quotes equally.

12.2   Liquidity Providers

[1] The admitted liquidity provider shall ensure a liquid market by placing orders or quotes in the order book of individual securities.

[2] The Exchange may admit one or more liquidity providers per security.

[3] The rights and duties of the liquidity provider shall be defined by the Exchange per trading segment and trading service.

[4] The details for liquidity providers are laid down in the List of Charges under the Trading Rules.

12.3   Pre-opening

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

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

[3] The Exchange shall calculate the theoretical opening price (TOP) in the auction procedure and publish it on an ongoing basis.

[4] No transaction and therefore no price formation shall take place.

12.4   Opening and Opening Auction

The Exchange shall open trading with an auction if, after opening, there is a situation in the order book that can be executed.

12.5   Open Order Book

[1] During the open order book trading period, orders and quotes that can be executed do not lead directly to trades, rather an auction is triggered as soon as there is a situation that can be executed (see also description under Clause 7 above).

[2] If an order cannot or can only be partially executed, the remainder shall remain in the order book.

[3] The Exchange will extend the call phase if the theoretical price is outside the range of the reference price.

[4] The Exchange may in certain instances interrupt trading.

[5] The reference price shall be the price paid last. Reference price adjustments remain reserved.

12.6 Close of Trading with Closing Auction

[1] Immediately before the close of trading, an auction is conducted in accordance with the principle of highest executable volume. If there is a trade in the auction, this price shall be the closing price and the new reference price. If there is no trade in the auction, the last trade of the day shall be the closing price.

[2] The Exchange reserves the right to extend the call phase if the theoretical price is outside the range of the reference price.

[3] The Exchange may adjust the reference price in certain cases.

12.7 Close of Trade without Closing Auction

[1] If trading closes without an auction, trading closes after the end of the "open order book" trading period.

[2] The closing price and reference price shall correspond to the price last established in the open order book.

[3] The Exchange may adjust the reference price in certain cases.

12.8 Post-trading

[1] After the close of trading, the Exchange shall delete all non-executed orders whose validity ends on the date of the current trading day.

[2] Participants and liquidity providers may enter new orders and quotes in the order book or delete existing ones. Orders with a validity date of the current trading day shall not be accepted.

[3] The Exchange shall calculate the following day's theoretical opening price (TOP) in the auction procedure and publish it on an ongoing basis.

[4] No transaction and therefore no price formation shall take place.

[5] Quotes shall expire at the end of the trading day.

IV.   Correction and Cancellation

13 Correction

[1] A participant may correct the information on whether the trade was an own or a client transaction.

[2] A trade may only be corrected once.

14   Cancellation

14.1   Principle of Irregular On-Exchange Trades

[1] If trades which violate the provisions of the Trading Rules have been made on the Exchange in error, the parties shall apply to the Exchange to have such trades cancelled. Clauses 14.2 et seq. below shall apply only to the cancellation of such trades that violate the Trading Rules.

[2] The details are laid down in the "Market Control" Directive.

[3] Trades at market prices resulting from wrongful order submissions shall not be declared null and void. This shall apply generally to trades that do not violate the Trading Rules and that the parties wish to take back. The Exchange does not provide such a function and the parties must reverse the trade over the counter (OTC).

14.2   Procedure

[1] Both of the parties involved in the trade shall apply to the Exchange to have the trade that violates the Trading Rules cancelled. The Exchange shall provide suitable means and determine a suitable procedure for this application.

[2] The application for the cancellation of a trade that violates the Trading Rules shall contain the following information:

   a)   identification of the participant;

   b)   Identification of the securities concerned (ISIN);

   c)   Time of execution (trade date and time);

   d)   Identification of the trade (Trade Match ID).

14.3   Effect of a Cancellation

[1] If the Exchange cancels a trade, it will publish the cancellation in the market data.

[2] Any reversals fall within the scope of the settlement organisation of SIX Digital Exchange Ltd. Such reversals are therefore not subject to the atomic trading and settlement principle. It is therefore possible that claims to reverse transfer exist that cannot be settled directly.

14.4   Costs

[1] The Exchange may charge a fee for entering and cancelling trades.

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

V. Short-Selling

The short-selling of securities traded on the Exchange is not permitted.

# VI.	Trading Segments

## 15	Classification of Markets and Trading Segments

[1] The Exchange operates markets and trading segments, and allocates individual securities to these individual trading segments.

[2] The Exchange specifies the provisions for the individual trading segments in the annexes to the "Trading Parameters" Guideline.

This directive has been approved by the Participants & Surveillance Committee of the Regulatory Board on 29 November 2021 and will be in effect as of 1 December 2021.

Annex A – Price Steps (Tick Size)

[1] The Exchange defines price steps and assigns securities to those individual price steps.

[2] The criteria by which securities are allocated to these price steps, or alternative price steps, are set out in the relevant Annex to the "Trading Parameters" Guideline.

	Liquidity bands Average number of trades (ANT)	
	Band A	**Band B**
Price	0 ≤ DAA ≤ 10	10 < DAA
0 ≤ price < 0.1	0.0005	0.0001
0.1 ≤ price < 0.2	0.001	0.0001
0.2 ≤ price < 0.5	0.002	0.0001
0.50 ≤ price < 1	0.005	0.0001
1 ≤ price < 2	0.01	0.0002
2 ≤ price < 5	0.02	0.0005
5 ≤ price < 10	0.05	0.001
10 ≤ price < 20	0.1	0.002
20 ≤ price < 50	0.2	0.005
50 ≤ price < 100	0.5	0.01
100 ≤ price < 200	1	0.02
200 ≤ price < 500	2	0.05
500 ≤ price < 1,000	5	0.1
1,000 ≤ price < 2,000	10	0.2
2,000 ≤ price < 5,000	20	0.5
5,000 ≤ price < 10,000	50	1
10,000 ≤ price < 20,000	100	2
20,000 ≤ price < 50,000	200	5
50,000 ≤ price	500	10

[3] The Exchange publishes the price steps allocated per security with the static data.