October 8, 2008

Exchange Notice
SAXESS user news 13/08

As of October 13 - OMX Nordic Exchange Copenhagen, Helsinki, Iceland and Stockholm will launch a new release of the trading system SAXESS.

The information about these coming market changes has been sent out in previous IT-notices during the period May to September. This Exchange Notice is compiled information and a reminder of these market changes.

Summary of New Functions

The main functionality enhancements in SAXESS 5.0.1 are
1. Non-displayed Orders
2. Optional Clearing (Technical implementation only. Not yet available for member use)
3. Round Lot One
4. Market price on Fill-and-Kill orders and Fill-or-Kill orders
5. Four decimals in trades and Trade Reporting
6. EP-orders also valid in trading period 6 and 7
7. Mid-price matching (only for Iceland)

1.   Non-displayed orders

OMX Nordic Exchange[1] will introduce non-displayed orders (i.e. zero iceberg orders) for orders in line with the large in scale criteria (LIS) specified in MiFID.

Non-displayed orders meeting the LIS criteria will be implemented in Helsinki, Stockholm, Copenhagen and Iceland.

The All or None (AoN) function will not be implemented in connection to non-displayed orders in this release as earlier communicated.

Implementation of non-displayed order functionality aim to better facilitate large orders in the order book, without market impact or risk of front running.
The implementation of non-displayed orders will offer an alternative to trading outside the market.

Other exchanges in Europe have similar trading functionality in place.

Non-displayed orders will be prioritized after visible orders and ordinary iceberg orders. See also detailed description of non-displayed orders on the last pages of this document.

All current members of OMX Nordic Exchange will have the possibility to utilize the non-displayed orders as follows:

- In OMX Nordic Exchange Helsinki, this change will affect the main Finnish market (OMX HEL Equities);

- In OMX Nordic Exchange Stockholm, this change will affect the main Swedish market (OMX STO Equities), First North Sweden (First North STO) and First North Helsinki (First North HEL);

- In OMX Nordic Exchange Copenhagen, this change will affect the main Danish market (OMX CPH Equities) and First North Denmark (First North); and

- In OMX Nordic Exchange Iceland, this change will affect the main Icelandic market (OMX ICE Equities, OMX ICE Alternative Market and OMX ICE Fund units) and on First North Iceland.

2.   Optional Clearing

Optional Clearing will prepare the SAXESS system for enabling of this function as part of a subsequent business implementation of the functionality. The implementation of Optional Clearing is subject to FSA approval.

Once the business implementation has been carried out, the Optional Clearing solution will offer members the possibility to opt for this clearing function at User Account and Routing Account level where:

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[1] For the purpose of this notice OMX Nordic Exchange refers to OMX Nordic Exchange Copenhagen A/S, OMX Nordic Exchange Helsinki Oy, OMX Nordic Exchange Iceland hf. and OMX Nordic Exchange Stockholm AB.

> ➢ If both parties to a trade have the setting "Optional Clearing", the trade will be sent to a European CCP (a single Optional Clearing venue will be chosen to cover all OMX Nordic Exchange markets)
> ➢ If only one or neither of the parties to a trade has the setting "Optional Clearing", the trade will be default cleared (i.e. as per current functionality in SAXESS 5.0.0.)
> ➢ Self clearing option will be available for internal trades i.e. trades are not sent to Default Clearing nor to Optional Clearing

Once the business implementation has been carried out, the Optional Clearing choice will be made per user-account/routing-account as an opt-in/opt-out decision. Hence, it will not be possible to choose to enable Optional Clearing on a trade by trade basis. The 5.0.1 release will, however, only technically implement the functionality, which will be configured in SAXESS for use at a later stage.

A separate notification will be sent out once the functionality is available for members.

3.   Round Lot One

OMX Nordic Exchange will harmonize the Nordic markets further by implementing round lot size one in Stockholm and Copenhagen. Round lot one is already in effect in Helsinki and Iceland.
By implementing round lot one liquidity and access to trading for individual investors will improve.

Parallel with the launch of Round Lot 1, MP Order with Fill or Kill (FoK) and Fill and Kill (FaK) limitation will also be implemented in Stockholm and Copenhagen.

System test in SAXTST1 was available in Stockholm from June 30, 2008.
System test in SAXTST1 was available in Copenhagen from July 7, 2008.

Round lot one will affect the following submarkets on the main market and on First North: Equities, Warrants, Fund units and Equity rights. Convertibles are excluded from this change.
Round lot one has already been implemented on submarket Exchange Traded Funds (ETF) in Stockholm, effective from January 2008.

Experience from OMX Nordic Exchange Helsinki, where round lot one was implemented on all equity related markets in 2006, has been positive by bringing along upswing in trading and strengthened price competition. It has increased both turnover and liquidity in the order books and also made the relative spreads narrower.

The decision to implement round lot one was based on the results from a member consultation and on discussions with investors which showed a clear support for round lot one.
This change is in harmony with the industry's best practice. The largest exchanges in Europe have round lot one today.

4. Market price on Fill-and-KILL orders and Fill-or-Kill orders

OMX Nordic Exchange will harmonize the Nordic markets further by implementing price condition 'MP' (Market Price) for round lots in Stockholm and Copenhagen.

Price condition 'MP' (Market Price) can be used during Continuous Trading period together with 'Fill-and-Kill' and 'Fill-or-Kill' for the following submarkets on the main market and on First North:
Equities, Warrants, Fund units and Equity rights. Convertibles are excluded from this change.

Stockholm
OMX STO Eq.Rights, Subs.Opt, Int.Shares
OMX STO Equities
First North Helsinki
First North Stockholm

Copenhagen
OMX CPH Rights (subscription and bonus)
OMX CPH Other Collective Investment Schemes
OMX CPH Equities
OMX CPH Investment Funds
First North Copenhagen

5. Four Decimals in trades and Trade Reporting

As earlier communicated, OMX Nordic Exchange aims to further enhance the Nordic markets by implementing four decimals in trade reporting on OMX Nordic Exchange.

The launch decision for this functionality was made following the results of a Technical Readiness Survey, IT Forums and feedback from members regarding readiness for the change.

On-Exchange Trade reporting will allow trade reporting with 4 decimals.
➤ Order book orders can only be entered with two decimals, however additional two zeros will be added for auto matched trades.
➤ Four decimals will be shown for all trade price fields (for example high, low, close, average, last) in order book, in trade ticker etc. including auto matched and trade reported trades.
➤ On-exchange manual trades will be enterable with four decimals.

The four decimals in Trade Reporting will be implemented on all order books on the following submarkets:
Copenhagen
OMX CPH Rights (subscription and bonus)
OMX CPH Other Collective Investment Schemes
OMX CPH Equities
OMX CPH Investment Funds
First North
Helsinki
OMX HEL Equity Rights
OMX HEL Equities

Iceland
 OMX ICE Equity Rights
 OMX ICE Alternative Market
 OMX ICE Equities
 OMX ICE Collective Investment Undertakings
 OMX ICE Fund Units
 First North Iceland
Stockholm
 OMX STO Eq.Rights, Subs.Opt, Int.Shares
 OMX STO Equities
 First North HEL
 First North STO

Additionally, four decimals will be available on the following Fixed Income submarkets:
 Iceland
 OMX ICE DP Fixed Income
 OMX ICE CP Fixed Income
 OMX ICE Premium Bonds

This change of decimals has been available for testing in external test system since Q2 2008.

6. EP-orders also valid in trading period 6 and 7

EP-orders are valid for all equity submarkets on the Nordic markets. In previous SAXESS-releases this order type was valid for validity period '4' (next call).
Now the function is extended to be valid for two more trading periods: '6' (opening call) and '7' (closing call)

7. Mid-price matching

OMX Nordic Exchange Iceland will implement mid-price matching in its equity markets. Mid-price matching refers to the matching of orders at the mid point between the best displayed bid and ask offers in the order book, i.e. the mid price. Mid-price matching is enabled by the introduction of so-called mid-price orders, which are not visible in the order book and will only match at the mid-price.

The introduction of invisible mid-price orders is aimed at increasing liquidity in OMX Nordic Exchange Iceland's equity markets. Mid-price orders afford market participants the opportunity to reduce the market impact of large orders, the risk of front running and counterparty search cost. OMX Nordic Exchange Iceland expects that this will lead to increased order volume which will in turn increase equity trading on the Exchange and reduce trading costs.

In order to safeguard the quality of the mid-price matching, it will only be enabled in a given order book if the spread in the order book does not exceed a pre-defined upper limit. Thus, mid-price matching in a given order book may at different times within the same trading day be either enabled or disabled. The spread in this context is calculated as follows:

(Best ask – Best bid) / Best bid

The spread calculation is only based on displayed orders. Mid-price orders also have to satisfy size conditions determined by the Exchange. The upper spread limits, determining whether mid-price matching is turned on or off, and the minimum mid-price order size are different for large cap companies and all other companies. Information on the size and spread conditions can be found in the table below.

	Large caps	Other shares
Minimum size	ISK 50,000,000	ISK 25,000, 000
Maximum spread	1%	2%

- Mid-price matching is enabled in continuous trading, as long as the spread condition above is satisfied.
- Mid-price orders have to be entered in multiples of two round lots (i.e. two shares since the round lot for all shares in the Icelandic market is one share). Orders marked as mid-price orders are rejected if they are below the minimum size given above and if they are not multiples of two round lots.
- Mid-price orders can be either limit orders or market price orders.
- Other orders can match against mid-price orders but only on entering and if and only if they satisfy the minimum size condition for mid-price orders. If a non mid-price order is not matched against a mid-price order, or only partially, it is transferred to the order book and will not attempt another match against mid-price orders.
- Mid-price matching can be triggered by a new incoming order hitting an existing mid-price order as well as by a change in the spread resulting in a match between existing mid-price orders.
- If a mid-price order is partially filled and the remaining part does not fulfill the minimum size requirement for mid-price orders, the remainder, nonetheless, continues to be invisible.
- Partial execution of mid-price orders can be avoided by an "All or None" condition. ("All or None" function will not be launched at this time.)
- Same post-trade information is disseminated for trades that are the result of mid-price matching as for other trades. The trades will be distinguishable through the use of a new trade type (MIDP).

Mid-price matching will be introduced on OMX Nordic Exchange Iceland's Main Market (OMX ICE Equities), the Alternative Market (OMX ICE Alternative Market), the market for ETFs (OMX ICE Fund Units) and First North Iceland.

Non-displayed orders functional description

Detailed Description

Central System

Current matching functionality and principles shall be used. Visible orders shall be prioritized before non-displayed (i.e. zero iceberg) orders on the same price.

An attempt to enter a non-displayed order with a value (price * volume) less than **"Min Non-displayed Order Value"** will be rejected.

The minimum value for non-displayed orders will follow the large in scale criteria defined in MiFID, for values in applicable currencies, see the table below.

Large in scale orders are calculated using the following criteria:

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Class in terms of Average daily turnover ADT	ADT< €500 000	€500 000 ≤ADT < €1 000 000	€1 000 000 ≤ADT < €25 000 000	€25 000 000 ≤ADT < €50 000 000	ADT ≥ €50 000 000
Minimum size of order qualifying as large in scale compared with normal market size	€50 000	€100 000	€250 000	€400 000	€500 000

DKK

Class in terms of Average daily turnover ADT	ADT< DKK 3 750 000	DKK 3 750 000 ≤ADT < DKK 7 500 000	DKK 7 500 000 ≤ADT < DKK 187 500 000	DKK 187 500 000 ≤ADT < DKK 375 000 000	ADT ≥ DKK 375 000 000
Minimum size of order qualifying as large in scale compared with normal market size	DKK 375 000	DKK 750 000	DKK 1 875 000	DKK 3 000 000	DKK 3 750 000

SEK

Class in terms of Average daily turnover ADT	ADT< SEK 4 596 500	SEK 4 596 500 ≤ADT < SEK 9 193 000	SEK 9 193 000 ≤ADT < SEK 229 825 000	SEK 229 825 000 ≤ADT < SEK 459 650 000	ADT ≥ SEK 459 650 000
Minimum size of order qualifying as large in scale compared with normal market size	SEK 459 650	SEK 919 300	SEK 2 298 250	SEK 3 677 200	SEK 4 596 500

ISK

Class in terms of Average daily turnover ADT	ADT< ISK 60 000 000	ISK 60 000 000 ≤ADT < ISK 120 000 000	ISK 120 000 000 ≤ADT < ISK 3 000 000 000	ISK 3 000 000 000 ≤ADT < ISK 6 000 000 000	ADT ≥ ISK 6 000 000 000
Minimum size of order qualifying as large in scale compared with normal market size	ISK 6 000 000	ISK 12 000 000	ISK 30 000 000	ISK 48 000 000	ISK 60 000 000

Open Protocols

Not affected.
A Non-displayed order will be indicated by setting XTP FID_OrderInsert field "Volume, Open" = "0" and "Volume, Total" > "0".
Entering of an order with "Volume, Open" ="0" with a value < **Min Non-displayed Order Value** will result in an error message. XTP documentation reflects this new behavior.

Participant User Interfaces

Entering "O Amount" = 0 upon order entry indicates a non-displayed order (zero ice-berg order) with zero visible volume. Open Amount = 0 will be handled on the XTP UC flow.

Matching rules for Non-displayed orders (i.e. zero iceberg orders)

Order Priority

The order priority is basically not changed, however the non-displayed orders might need some clarifications since they are non-visible.

1) Best price (yes/no)
   A buy order with a higher price has higher priority and a sell order with lower price has higher priority.

2) Preferred counterparty (yes/no)
   Orders originating from a preferred counterparty (internal) will have higher priority.

   Time:
   Orders that have resided longer in the orderbook will have higher priority. It can be noted that this step will always distinguish two orders since they cannot have the same time stamp.

3) Visibility (yes/no):

   Visible orders have higher priority than non-displayed orders.

4) Time:
   Orders that have resided longer in the orderbook will have priority. It can be noted that this step will always distinguish two orders since they cannot have the same time stamp.

Matching rules during uncross

Non-displayed orders without any volume restriction will take part of the normal round lot uncross as any other order.

Round lot uncross at equilibrium price:
This is performed according to existing SAXESS functionality.

Circuit breakers

A normal Non-displayed order is subject to circuit breakers as any other single order.

Detailed description

- Non-displayed order volumes are included in MBL transparency.

    o Volume is aggregated and included in the MBL message

- Non-displayed orders are not publically disseminated with MBO-transparency configured.

    o Information about Non-displayed orders is never disseminated on multicast (inserts updates etc).

- Non-displayed orders are privately disseminated (UC-message).

    o Are privately disseminated as normal iceberg orders.

- Non-displayed orders are not included when calculating price spreads. The visible spread can hence be larger than the actual spread in an order book.

- Non-displayed orders must have a value (volume * price) equal to or larger than the minimum value, set by the exchange.

- No order update shall be possible on Non-displayed orders.

    - Non-displayed orders must have a value (volume * price) larger than required minimum value (see LIS-table) after an update.

- The volume and price can be updated as long as the order value remains higher than or equal to the minimum value, set by the exchange.

- Non-displayed orders remain hidden even if the volume is decreased due to trading.

- Preferred counterparty rules (if enabled) will also apply to Non-displayed orders on the price level.

Non-displayed order limitations

- The open amount for Non-displayed orders can never be modified.

- The open amount for any other order can never be modified to be zero.

- Functionality only configurable for submarkets with a monetary price type.

- Functionality applicable for single orders only.

For support and further information – please contact:

Contacts below are reserved for trading Members, information Vendors and ISV's

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