

November 6, 2008

Attachment to SAXESS user news 17/08

Detailed description on AoN-function for Non-displayed orders

## Non-displayed Orders Functional Description

### Central System

Current matching functionality and principles are used. Visible orders are 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 table<sup>1</sup>:**

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

The amounts in EUR above are converted to local currencies for DKK and SEK once a year.

<sup>1</sup> More details can be found in the following link:

[http://www.omxnordicexchange.com/digitalAssets/38/38462\\_ProductSheet\\_TradeRep\\_Graphics.pdf](http://www.omxnordicexchange.com/digitalAssets/38/38462_ProductSheet_TradeRep_Graphics.pdf)

## 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

### Order Priority

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

#### 1) Best price.

A buy order with a higher price has higher priority and a sell order with lower price has higher priority.

#### 2) Preferred counterparty.

Orders originating from a preferred counterparty (internal) will have higher priority.

#### 3) Time:

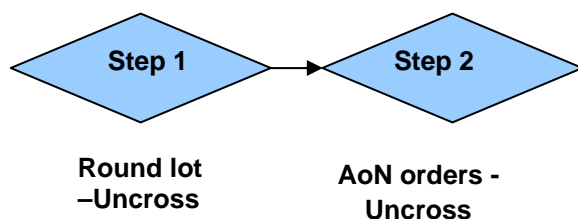
Orders that have resided longer in the order book will have higher priority. It can be noted that this step will always distinguish two orders since they cannot have the same time stamp.

#### 4) Visibility:

Non-displayed orders have lower priority than other orders.

## Matching rules during uncross

Non-displayed orders without any volume condition will take part of the normal round lot uncross as any other order. However, orders with volume conditions, All-or-None, should not take part in the uncross procedure, both due to performance issues and for the level of complexity, therefore a modified type of uncross for these kind of orders is introduced.



Step 1: Round lot uncross at equilibrium price.

This is performed according to existing SAXESS functionality. Note that zero visible volume orders without AoN condition are included in the uncross phase.

### Step 2: AoN order uncross (at equilibrium price from step 1)

Orders with AoN volume restriction will, if they accept the equilibrium price, be made aggressive according to time priority. AoN orders will also interact with round lot orders that accept the equilibrium price but did not match in step 1.

- Opening Call: If there is no equilibrium price from the round lot uncross (step 1), yesterdays closing price is used if it's within the round lot spread to uncross the AoN orders. If there is no closing price or the closing price is outside the round lot spread, no uncross is performed.
- Other Calls/Closing Calls: If no equilibrium price (step 1), the last 'last paid' price is used, if it's within the round lot spread, to uncross the AoN orders. If there is no 'last paid' no uncross will be performed.

Note that AoN orders do not affect the equilibrium price from step 1, and thus the volume is not included in the MBL message.

Step 3: If orders with crossing prices are residing in the order book (due to volume restrictions), they will be matched and stamped as executed in COTR

### **Circuit breakers**

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

### **Detailed description for Non-displayed orders**

- Volume is included in MBL transparency (not valid for AoN-orders).
- Volume is aggregated and included in the MBL message (not valid for AoN-orders).
- Are not publically disseminated with MBO-transparency configured.
- Information about Non-displayed orders is never disseminated on multicast (inserts updates etc).
- Are privately disseminated (UC-message).
- Are privately disseminated as normal iceberg orders.
- Are not included when calculating price spreads. The visible spread can hence be larger than the actual spread in an order book.
- 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.
- 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.
- 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.