

Market Model
NASDAQ OMX Nordic
INET Nordic

NASDAQ OMX Nordic Market Model 2.2

Valid from April 1, 2011

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Definitions

The official definitions are in the NASDAQ OMX Nordic Member Rules (NMR).

Automatic Order Matching	The process in the Order Book by which sell and buy orders are matched automatically when the price, volume and other specifications for a given order correspond with order(s) previously entered in the Order Book.
BBO	Best Bid Offer of an Order Book.
Call	Auction process to facilitate price formation with two distinct parts: the first part is an order management phase and the second part is a matching process for all eligible orders. The matching process is called an uncross (as it removes all orders with crossing prices).
Call, closing	The Closing Call is the last Call of the day and produces the last auto matched trades of the order book (if there are eligible orders available for matching).
Call, opening	The Opening Call is the first Call of the day and produces the first auto matched trades of the order book (if there are eligible orders available for matching).
Imbalance order	The imbalance order is an order type that can be used in the auctions. It accepts the equilibrium price reached and fills the theoretical imbalance between the surplus and the deficit side.
Limit order	A Limit order stipulates a maximum purchase price or minimum selling price.
Market order	A market price order is an order to sell or buy a stock at the current market price.
Market Segment	Grouping of Order Books with common characteristics, for example Order Books traded in the same way or Order Books having the same opening hours.
On Exchange Trade	A trade that is automatically matched in the Order Book in accordance with the NASDAQ OMX NORDIC Member Rules or executed outside the Order Book but in accordance with the NASDAQ OMX NORDIC Member Rules and reported to the exchange as a manual trade.
On Open /Close orders	Specifically request on execution at the opening or closing price of the call. They can be specified as market priced or limit priced orders.
Pegged order	Pegged orders allow to price orders relative to the current market price for a security.
Post-Trading Session	The period during the Trading Session after the Trading hours, where orders can be cancelled and in some markets order updates with no trade impact can be conducted.
Pre-Close	Order Book state in the first phase of Closing Call, preceding the Uncross, when Order Management is allowed.

Pre-Open	Order Book state in the first phase of Opening Call, preceding the Uncross, when Order Management is allowed.
Price Limit Validation	Price limit check performed upon member request on entered orders. The last sale will be the source of comparison.
Reserve Order	In a Reserve order, a certain portion of the total volume of an order is not displayed in the Order Book (a.k.a. Iceberg order).
Round Lot	The minimum number of shares for an instrument which is used for certain statistics and calculations.
Time of agreement	The time that states when the trade was agreed. Can be used at registration of manual trades.
Time of Trade Execution	<p>The time at which an automatically matched trade is matched or a manual trade has been entered.</p> <p>For NASDAQ OMX Nordic, market time when the trade is confirmed is considered as the Time of Trade Execution.</p>
Time of Trade Publication	The time the trade was disseminated, i.e. when the trade was made public. For trades whose dissemination is not delayed, this is equal to the Time of Trade Execution.
Trading Hours	<p>Trading Hours for each market segment are found in Chapter 3 of this document.</p> <p>Trading Hours start from the Uncross of the opening call and include the Uncross of the closing call.</p>
Trading Session	The period during an exchange day which includes the Pre-Open session, Trading hours and the Post-Trading session. The Pre-Open session includes the Opening call up to, but not including, the Uncross.
Uncross	A call ends with an Uncross where price determination and share allocation together with order and trade information dissemination take place. Uncross lasts a short time, usually a fraction of a second.
Volatility Guard	Volatility Guard is a trading pause and resumption process triggered by an aggressive single order that deviates too much in percentage from the last sale price (Dynamic Volatility Guard) or from the reference price, which is normally the day's opening price (Static Volatility Guard). When the Volatility Guard is triggered, continuous trading is halted followed by an auction period after which the order book moves back to continuous trading.

1 Introduction

This document describes the functionalities for trading of equities and related on the regulated market segments and First North on NASDAQ OMX Nordic, including NASDAQ OMX Baltic¹. Therefore this document covers functionalities that apply to Copenhagen, Stockholm, Helsinki, Iceland, Tallinn, Riga and Vilnius. Fixed Income is not covered by this document.

Chapter 2 describes the market structure, while chapter 3 presents an overview of the trading phases. In chapter 4, the flow of the trading day is discussed. Chapter 5 outlines the registration of manual trades.

Chapter 6 presents the order types available and discusses the order modification. Order routing on NASDAQ OMX Nordic is described in Chapter 7.

While the document has been prepared on the basis of the best information available, the exchange accepts no liability for decisions taken, or systems work carried out by any party, based on this document. This document does not form part of the contractual documentation between exchange and its customers. Content of this document may also be subject to discussions and in some cases approval from relevant authorities.

While the NASDAQ OMX NORDIC Member Rules (NMR) is a legally binding document between Members and the respective exchanges, the purpose of this Market Model document is to provide additional guiding information for trading members.

Additional documents referenced in this documentation can be found at NASDAQ OMX Nordic's official website and also on the Member Extranet.

¹ For the purpose of this document NASDAQ OMX Nordic refers to, either each individually or all together, NASDAQ OMX Copenhagen A/S, NASDAQ OMX Helsinki Ltd, NASDAQ OMX Iceland hf. and NASDAQ OMX Stockholm AB. NASDAQ OMX Nordic may also include NASDAQ OMX Baltic that respectively refers to NASDAQ OMX Riga, NASDAQ OMX Tallinn and NASDAQ OMX Vilnius.

2 Overview of Market

2.1 Market Structure

The hierarchy of markets is based on different market segments which group securities into relevant collections for various trading, administrative and regulatory purposes. The following structure is applied within NASDAQ OMX Nordic market.

Market segments

NASDAQ OMX Nordic is divided into the following market segments:

- NASDAQ OMX Nordic Equities and Related
- Miscellaneous Markets

The following instrument types are supported by the market segments:²

	Equities and Related					Miscellaneous Markets				
	STO Equities	HEL Equities	CPH Equities	ICE Equities	Riga/Tallinn/Vilnius	First North STO	First North Finland	First North CPH	First North ICE	First North Riga/Tallinn/Vilnius
Shares	X	X	X	X	X	X	X	X	X	X
Warrants and Certificates	X	X	X		X *					
Equity Rights	X	X	X	X	X	X	X	X	X	
Investment Fund Units and ETFs	X	X	X	X	X					
Convertibles	X					X				
ETC	X									
Other Collective Investment Schemes			X	X						

*Currently no order books active.

² NASDAQ OMX Iceland will also trade fixed income products on the INET trading platform. There is a separate market model document created for this purpose.

2.2 Lists

While the list structure at NASDAQ OMX Nordic has no impact on the market model, it may be useful to be aware of the lists for the main equity market. Details regarding all available lists are provided at NASDAQ OMX Nordic website.

The Nordic List

The local stock exchanges will continue to be the listing venue and point of contact for already listed companies and future applicants to the Nordic list.

The list structure for NASDAQ OMX Nordic is based on the Nordic List concept:

1. Large Cap
2. Mid Cap
3. Small Cap

Companies on the Nordic list are presented in a common manner and divided into segments. Companies are presented first by market capitalization and then by industry sector, following the international Global Industry Classification Standard - GICS developed by Morgan Stanley Capital International Inc. and Standard & Poor's.

There are three market capitalization segments: Nordic Small Cap, Nordic Mid Cap and Nordic Large Cap.

Nordic Large Cap segment includes companies with a market capitalization equivalent to EUR 1 billion or more, Nordic Mid Cap segment includes companies with a market capitalization of EUR 150 million or more, but less than EUR 1 billion. Nordic Small Cap segment includes companies worth a market capitalization of less than EUR 150 million. All classes of the listed share in the company are included in the market capitalization calculation.

Multiple listed companies are placed in the same segment on all exchanges, based on the highest market capitalization for the company.

Other Lists

In addition to the Nordic List concept, there are additional lists for special circumstances like:

Stockholm:

1. When Issued
2. Xternal list for foreign companies

Helsinki:

1. Prelist
2. Other Securities

Copenhagen:

1. Investment Funds
2. Other collective Investment schemes

Baltic List

Structure of lists of securities traded on the Tallinn, Riga and Vilnius exchanges:

1. Baltic Main List
2. Baltic Secondary List

The Baltic Main List is a line-up of all blue-chip companies listed on the Tallinn, Riga and Vilnius stock exchanges. To be eligible for inclusion, a company must have 3 years of operating history, an established financial position, market cap of not less than EUR 4 million, with reporting according to the International Financial Reporting Standards, and a free float of 25% or worth at least EUR 10 million. The Baltic Secondary List comprises companies that do not meet quantitative admission requirements (free float, capitalization). The admission requirements are not as strict compared with those of the Baltic Main List.

2.3 Trading Rights

Trading rights are given to the following user categories:

1. Trading right is given to the members' exchange traders. All trading personnel must be authorized to trade. The authorization and the trading rights are according to special agreements on the financial market when applicable.
2. Direct Market Access (DMA)³ entitles a member to electronically and automatically route clients' orders directly to the trading system through the use of Internet connections or other technical connections between the trading member and the client.
3. Algorithmic trading⁴ entitles a member to trade through automated trading facilities in the form of placement, change, or cancellation of orders in the Order Book by using software, which automatically generates a large number of orders in response to specific pre-programmed factors. A special form of automated trading account (AUTD) can also be set up to handle automatic trading, that entitles to a discount according to the current price list in force. The difference between Automated trading right and AUTD account is that AUTD is to be used for purely automated trading, i.e. common execution algorithms are not eligible for this account. The definition of the eligible trading flow can be found from a separate Terms and Conditions document.

Trading rights are set on Exchange level for each member. This means that the exchange trader automatically can trade in all Order Books at the exchanges to which membership is established.

Notes:

- Although the orders can be entered/routed automatically to the trading system, there are always authorized personnel at the exchange member responsible for all orders.

³ [For more information, see NASDAQ OMX Member Rules section 4.9](#)

⁴ [For more information, see NASDAQ OMX Member Rules section 4.11](#)

- Membership needs to be applied separately for each of the exchanges within NASDAQ OMX Nordic, in order for the trader to start trading on each of the exchanges.

3 Trading sessions and holiday schedules

3.1 Regular trading sessions for regulated markets

Times in CET	Opening		Continuous Trading	Closing		After Market	
	Pre-open	Uncross		Pre-close	Uncross	Post Trade	Closed
Stockholm and Helsinki Equities	08:00	09:00	09:00-17:25	17:25	17:30	17:30	18:00-08:00
Market segment OMX STO Equities NOK Follows Norwegian Holiday schedules (Appendix I)	08:00	09:00	09:00-17:25	17:25	17:30	17:30	18:00-08:00
Stockholm and Helsinki Warrants	08:00	09:00	09:00-17:25	-	-	17:25	18:00-08:00
Stockholm and Helsinki Equity rights, subscr.opt, Convertibles, Fund Units	08:00	09:00:30	09:00:30-17:25	-	-	17:25	18:00-08:00
Copenhagen Equities	08:00	09:00	09:00-16:55	16:55	17:00	17:00	17:20-08:00
Copenhagen Warrants and Certificates	08:00	09:00	09:00-16:55	-	-	16:55	17:20-08:00
Copenhagen Equity Rights	08:00	09:00:30	09:00:30-16:55	16:55	17:00	17:00	17:20-08:00
Copenhagen Investment Funds and Other Collective Investment Schemes	08:00	09:45	09:45 -16:55	16:55	17:00	17:00	17:20-08:00
Iceland Equities, Equity Rights, ETF, Unit Trust Certificates (Collective Investment Undertakings), Fund Units	09:00**	10:30**	10:30**-16:25	16:25**	16:30**	16:30**	17:00-09:00**

Tallinn/ Riga/ Vilnius Equities, Fund Units	08:00	09:00	09:00-14:55	14:55	15:00	15:00	15:30- 08:00
Tallinn/ Riga/ Vilnius Warrants	08:00	09:00	09:00-15:00	-	-	15:00	15:30- 08:00

3.2 Regular trading sessions for First North markets

Times in CET	Opening		Continuous Trading	Closing		After Market	
	Pre-open	Uncross		Pre-close	Uncross	Post trade	Closed
First North Copenhagen	08:00	09:00	09:00-16:55	16:55	17:00	17:00	17:20- 08:00
First North Finland	08:00	09:00	09:00-17:25	17:25	17:30	17:30	18:00- 08:00
First North Iceland	09:00 **	10:30 **	10:30 **-16:25	16:25 **	16:30**	16:30**	17:00- 09:00**
First North Stockholm	08:00	09:00	09:00-17:25	17:25	17:30	17:30	18:00- 08:00
First North Convertibles	08:00	09:00	09:00-17:25	17:25	17:30	17:30	18:00- 08:00
First North Baltic	08:00	09:00	09:00-14:55	14:55	15:00	15:00	15:30- 08:00

**Times stated in box are CET standard time. During CET daylight savings time, the opening time and closing hours are an hour later in CET. Pre-Open starts at 10:00 CET, Opening Uncross at 11:30 CET and Closing Uncross at 17:30 CET.

3.3 Normal trading hours (local time)

The trading hours for NASDAQ OMX Nordic are as follows:

Market	Copenhagen	Stockholm	Helsinki	Iceland	Riga/Tallinn/Vilnius
Equities	09:00 – 17:00	09:00 - 17:30***	10:00 - 18:30	09:30-15:30	10:00 – 16:00
Equity rights	09:00:30 – 17:00	09:00:30 - 17:30	10:00:30 - 18:30	09:30-15:30	10:00 – 16:00
Convertibles		09:00:30 – 17:30			
Warrants and Certificates	09:00 – 17:00	09:00 - 17:30	10:00 – 18:30		10:00 – 16:00
ETF, Investment Funds and Other Collective Investment Schemes	09:45 – 17:00	09:00:30 - 17:30	10:00:30 - 18:30	09:30-15:30	10:00 – 16:00
First North	09:00:30 - 17:00	09:00:30 - 17:30	09:00:30 - 17:30*	09.30-15.30	10:00 -16:00
First North Convertibles		09:00:30 - 17:30			

*** During half days Post trade starts at CET 13:00, Closed 13:30

* First North Finland will be implemented in April 4, 2011.

3.4 Concept of calls

Opening, closing and intraday calls are formed with two sub phases; order management and uncross.

1. Order management
 - a. During pre-open there is market transparency of all orders with displayed volume. Orders only eligible for the opening call are not displayed.
 - b. Before the closing call, only displayed orders are visible. Orders only eligible for the closing call are not displayed.
2. Price determination and share allocation takes place in uncross.

The opening call procedure is conducted to open all Order Books at virtually the same time.

3.5 Schedule for Manual trades

Manual trades (Trade reporting) is allowed from Pre-open up until Closed on all markets. Please refer to chapter 4.3, 4.5 and 5 for more information.

3.6 Schedule for Holidays 2010-2012

See Appendix I.

4 Sessions during the trading day

4.1 Pre-open session

During the pre-open session, order and trade management including order entry for opening and closing calls is allowed.

In the examples below Stockholm and Helsinki schedules are described.

4.2 Calls

The Call procedure starts in all Order Books of the Market segment at virtually the same time. A Call consists of two phases: order management and uncross. The uncross lasts a short time, usually a fraction of a second. A random uncross sequence for the Order Books will be applied.

To facilitate the price formation process in calls, the order book information is supplemented with tentative matching information. It includes indicative matching price based on the prevailing order information, and how much total volume (including non-displayed volume) would be matched at the indicated price.

Uncross phase includes opening/closing price determination, share allocation and order information delivery.

4.2.1 Opening call

During the opening call there is Market by Order dissemination of the order book. Order entry and full order management is available through the 9:00 opening auction uncross (and after). Orders with time-in-force conditions Day, Good-Till-Cancel, Immediate-Or-Cancel and Good-Till-Time and On-open orders (Market-on-open (MOO), Limit-on-open LOO) and Imbalance on-open orders (IOOP)) become eligible interest for the opening auction. An IOC order is eligible for execution in the opening auction and will be cancelled after the completion of the opening auction if it is not fully executed. On-close orders (Market-on-close orders (MOC), Limit-on-close orders (LOC) and Imbalance on-close orders (IOOC)) can be entered, but are effective for closing auction only.

Orders are displayed in the market by order feed at their entered limit prices. The book will show crossed prices if the highest bids are at higher price levels than the lowest offers. The Market by Order does not include On-open, On-close, Non-displayed, Market and Hidden iceberg volumes.

Orders entered during pre-open are assigned time priority. No matching (continuous market) until 9:00. Imbalance information dissemination begins exactly 15 minutes before opening call for all issues, and is updated once a second if information is changed. Unexecuted orders (non-IOC and non-on open orders) remaining after the uncross will transition into the continuous market with retained time-priority.

		Pre-open	
		08:00 – 08:45	08:45 – 09:00
Order Management	Full order management Order entry: DAY, GTT, GTC, IOC, On-open and On-close orders Reducing volume maintains priority, other amendments through cancel/replace		
Auto matching	No		
Market by order transparency	All displayed orders (DAY, GTT, GTC, IOC). Shows displayed volume and limit price On-open/close orders, non-displayed, Market and Hidden iceberg volumes are not disseminated		
Equilibrium data (Net Order Imbalance information)	No	Equilibrium price (EP) with aggregated volume (Bid/Offer volume) Trade volume at EP including non-display volume on all orders. Signed imbalance volume based on all orders Disseminated from 08:45 and then every second if information is changed	

Figure 2 Schedule for a typical market opening with Call Auction at 09:00 in Stockholm/Helsinki

4.2.2 Order entry during call

Time priority for orders entered prior to the uncross and during continuous trading is based on the order entry time. Orders (with time-in-force condition GTC) entered prior to the current trading day will keep their time priority.

4.2.3 Closing call

Leading up to the closing call uncross there is Market by Order dissemination of the continuous order book. The Market by Order does not include MOC, LOC, IOOC, non-displayed, Market and Hidden iceberg volumes.

Continuous trading is halted 17:25 followed by a Pre-close period with no auto matching. The Pre-close period lasts approximately for 5 minutes and ends with the closing call uncross that randomly among order books takes place between 17:29:30 and 17:30. Order entry and full order management is available during the Pre-close with the exception for pegged orders that cannot be entered.

Orders with time-in-force conditions Day, Good-Till-Cancel and Good-Till-Time are transitioned automatically into the Pre-close and are eligible interest for the closing auction. Pegged orders are transitioned at their last limit price. On-close orders, i.e. Market-on-close orders (MOC), Limit-on-close orders (LOC) and Imbalance on-close orders (IOOC) can be entered until the closing call uncross. An IOC order entered during Pre-close is eligible for execution in the closing call uncross.

Orders entered are assigned time priority. The Imbalance dissemination begins exactly 17:25 and is updated once a second if information is changed.

	Continuous trading	Pre-Close
	9:00 – 17:25	17:25 - ~17:30
Order management	Full order management Order entry: DAY, GTT, GTC, IOC and on-close orders Order cancel and cancel/replace allowed	Full order management Order entry: DAY, GTT, GTC, IOC and on-close orders Order cancel and cancel/replace allowed Pegged orders remain with their last limit price. New pegged orders can not be entered
Auto matching	Yes	No
Market by order transparency	Unexecuted DAY, GTC, GTT orders from the opening uncross enter continuous market, IOC and On-open orders are cancelled Continuous book display orders are disseminated. On-close orders non-displayed and Hidden iceberg volumes are not disseminated	Unexecuted DAY, GTC, GTT orders from the continuous market enter Pre-close Display orders are disseminated. On-close orders, non-displayed, Market and Hidden iceberg volumes are not disseminated
Equilibrium data (Net Order Imbalance information)	No	Equilibrium price EP with aggregated volume (Bid/Offer volume) Trade volume at EP including non-display volume on all orders. Signed imbalance volume based on all orders Disseminated from 17:25 and then every second if information is changed

Figure 3 Schedule for market closing with Call Auction at 17:30 in Stockholm/Helsinki

4.2.4 Net Order Imbalance

During the imbalance dissemination period preceding the opening and closing uncross, the following Equilibrium data is provided:

- Equilibrium price (EP) and volume
 - Equilibrium price
 - Traded volume (including imbalance orders)
 - Imbalance volume (excluding imbalance orders)
 - Imbalance direction (Buy/Sell)
 - Best Bid price (will be equal to the EP if the book is crossed)
 - Best Ask price (will be equal to the EP if the book is crossed)
 - Bid volume at top of book or aggregated at EP if the book is crossed
 - Ask volume at top of book or aggregated at EP if the book is crossed

Best Bid and Ask prices and volumes are defined based on all orders except imbalance orders.

The Equilibrium Opening Price is based on all orders (Day, GTC, GTT, IOC, LOO, MOO, non-display) and includes all order volume (except imbalance orders). The Equilibrium Price is disseminated in valid prices (i.e. using the relevant tick size table).

The Equilibrium Closing Price is based on all orders (Day, GTC, GTT, IOC, LOC, MOC, non-display) and includes all volume except imbalance orders. The Equilibrium Price is disseminated in valid prices (i.e. using the relevant tick size table).

4.2.5 Price determination

In the opening uncross all orders except on-close orders are eligible. In the closing uncross, all orders in the continuous book and all on-close orders are eligible. An uncross will only take place if there are crossing prices in the total Order Book. That is, if the best bid price is equal to or higher than the best (lowest) ask price. If so, an equilibrium price using the relevant tick size table will be determined according to the following criteria:

The price that maximizes the number of shares at the time of the uncross to be executed.

If more than one price exists under (1), the uncross shall occur at the price that minimizes any imbalance.

If more than one price exists under (2), the uncross shall occur at the price with the highest market pressure (i.e. shares will remain unexecuted in the cross).

If more than one price exists under (3), the uncross shall occur at a price that is the average price between the highest price with positive imbalance and the lowest price with negative unbalance. If this price is off tick it will be rounded to nearest tick. In the case of equal distance it will be rounded down.

When the equilibrium price has been determined, all orders that are more generous than this price are filled.

4.2.6 Share allocation

Share allocation follows price-internal-display-time priority. NB. NASDAQ OMX Baltic use price-display-time priority.

In the allocation:

1. Orders better than the equilibrium price are always filled.
2. In case of imbalance, orders at the equilibrium price eligible for matching are filled first by using internal priority. The order on deficit side with the best priority defines the first 'preferred party'. Then possible orders of the preferred party on the surplus side at the latest paid price level are first matched against the orders of the preferred party on the deficit side. If the deficit side is not fully matched, the following preferred party is defined and orders are matched according to the same principles.
NB. Internal order prioritization is not applicable to NASDAQ OMX Baltic.
3. Orders at the equilibrium price eligible for matching are filled secondly by using time priority, if there are still orders on deficit side after internal priority allocation.

As the meaning of market orders implies a more aggressive price than any limit order, it means that market orders have the highest priority. In the auctions, market orders can be MOO/MOC orders, or regular market orders entered in Pre-Open/Close with

time-in-force IOC. Those orders will in effect have the highest priority of all orders. The ranking between these two flavors of market orders is based on time of entry.

Volume with any non-display attribute has lower priority than corresponding volume without non-display attribute. After the uncross, unexecuted MOO/MOC, LOO/LOC, and IOOP/IOOC orders will be cancelled.

A cross trade message will be published in real time after the cross with aggregated auction information. Individual trades executed in the calls will however be publicly published right after a cross and later at the end of the trading day according to specifications available on our member website. NB. The trading participants always receive their individual trades in their private data.

4.3 Manual trades in the Pre-Open session

Manual Trades made during the Pre-Open Session must be reported before the execution of the uncross.

4.4 Continuous trading

Trading in the Order Book in accordance with the NASDAQ OMX NORDIC Member Rules results in On Exchange trades. During continuous trading, manual trades can be registered with trade types specified in chapter 5.

Nordic@Mid offers a separate continuous crossing of reference price pegged non-displayed orders as a complement to the central order book. See Appendix N.

In continuous trading, each new incoming order is immediately checked for execution against orders on the opposite side of the Order Book. Orders can be executed in full or partially in one or more steps.

Orders in the Order Book will be matched according to the priority:
1=price; 2=internal; 3=displayed; 4=time.

NB. In NASDAQ OMX Baltic, the priority is: 1=price; 2=display; 3=time.

Buy or sell orders entered with the same price as a corresponding buy or sell order in the Order Book will be matched into a trade.

Buy orders entered into the Order Book with a higher buy price than the sell order with the lowest price (crossing prices), will be matched into one or more trades depending on the volume of the incoming order and the volume and the price of the sell order(s). The matching process will try to fill as much as possible of the volume in the incoming buy order until the limit of the crossing prices is passed.

Sell orders entered into the Order Book with a lower sell price than the buy order with the highest price (crossing prices), will be matched into one or more trades depending on the volume of the incoming order and the volume and the price of the buy order(s).

The matching process will try to fill as much as possible of the volume in the incoming sell order until the limit of the crossing prices is passed.

The priority order in the same price level is first internal (where the incoming order is executed against the member's own orders⁵), then displayed volume over non-displayed volume, and then the time when the order was sent to the Order Book.

Non-displayed volume may either be part of a reserve order ("iceberg order", chapter 6 for order types and attributes) or a fully non-displayed order.

Trades are published in real-time. In Iceland and for Oslo shares listed in Stockholm all trades are always anonymous without counterparty information. In NASDAQ OMX Baltic, Copenhagen, Stockholm and for most order books in Helsinki, counterparty information is given.

At the end of the trading day, all counterparty information is released allowing market share statistics and other analysis, except for Oslo shares traded in Stockholm.

The same rules apply to counterparty information in trade reporting.

4.5 Post-Trading

	Post trading
	17:30-18:00
Order management	Order cancel
Auto matching	No
Market by order transparency	Order cancel messaging
Equilibrium data (Net Order Imbalance information)	No

Figure 4 Schedule for a typical Post trading in Stockholm/Helsinki

During the post-trading session the following actions are allowed:

- Order cancellation
- Off hours transactions
- Limited order update (reduce volume on GTC orders)

Trade cancellations are made in accordance with NASDAQ OMX NORDIC Member Rules.

Manual trades during the post-trading session can be reported in the Post-Trading session (up until closed) or at the latest in Pre-Open session the next trading day.

Entering the Post-trading phase, the expired orders are deleted.

⁵ Member's own orders as defined by having the same Market Participant ID (MPID)

4.6 Closing

The trades for deferred publication (depending on the allowable defer time) are published. No information or functions are accessible but logons and database queries are allowed.

4.7 Trade halts

Trading may be suspended by the NASDAQ OMX Nordic either due to technical reasons or regulatory reasons. Suspensions are regulated in NASDAQ OMX NORDIC Member Rules.

Technical suspension means that trading is suspended when the Order Book(s) become inaccessible for technical reasons.

Regulatory suspension means that the Order Book(s) are suspended due to rules and regulations. A regulatory suspension may affect one or several markets, Market segments or Order Books.

4.7.1 Stop codes

The stop codes listed below prohibit order entries and order amendments as well as trade reporting. The Matching Halt is similar to the Trade Halt but trade reporting is allowed. All stop reasons are also published as Exchange Notices in close connection to the event.

Suspension due to technical reasons (manual or automatic)

Used when the system is restarted (by the technical operations personnel) after a fatal technical error. All order books are set in a stop state. Technical disruptions are regulated in NASDAQ OMX NORDIC Member Rules. Trading must be suspended if a technical disturbance causes a major part of the Members (market shares) to lose connection to the markets. In SAXESS this was known as a Technical stop (TS).

Suspensions due to regulatory reasons (manual)

On NASDAQ OMX Nordics, a trading halt is imposed when there is an obvious risk that trading will no longer be carried out on equal terms or will not be based upon sufficient information (unfair market conditions). All investors must have equal access to information about the instruments traded. Whenever NASDAQ OMX Nordic encounters a situation of 'unfair market conditions' a trading halt is considered.

There are three variants of trade halt due to regulatory reasons: Matching halt (MH), Trading halt (TH) and Regulatory halt (RH):

- **Trading halt (TH)**

The trade halt is used as a regular procedure that temporarily halts trading when trading cannot take place in an orderly fashion. The duration of the trading halt continues until trading can take place in an orderly fashion again. The following applies to Instruments covered by a trading halt:

- Automatic order matching ceases
- Placement of new orders or changes in orders are not permitted, however an order may be cancelled from the order book

- For Helsinki and Stockholm, Manual Trades entered into prior to the trading halt shall be reported immediately as soon as trading has resumed.
- For Copenhagen and Iceland, manual trades can be reported during a Trading Halt provided the member ensures that any non-Member counterpart is made aware that the instrument is in trading halt.

- **Regulatory halt (RH)**

The regulatory halt was introduced in connection to the introduction of MiFID. In Stockholm, where Finansinspektionen (the Swedish Financial Supervisory Authority) decides whether such trading halt shall prevail.

The following applies to Instruments covered by a trading halt:

- Automatic order matching ceases
- Placement of new orders or changes in orders are not permitted, however an order may be cancelled from the order book
- Manual trades may not be reported

- **Matching halt (MH) (not applicable for NASDAQ OMX Stockholm)**

Matching may be halted when an announcement regarding an Instrument is to be made, in the event of irregular price movements, suspicion of unequal information in the market, or other events. The duration of the matching halt shall be as short as possible. The following applies to Instruments covered by a matching halt:

- Automatic order matching ceases
- Placement of new orders or changes in orders are not permitted, however an order may be cancelled from the order book
- Manual trades may be reported.

4.7.2 Resuming trading after a trading suspension

When a halt ceases, trading is resumed and the restrictions on order entry and changes to orders cease. The members are again committed by orders placed in the order book. It may be decided that trading after a halt should be resumed with a price-discovery process (call auction) equal to the opening call (including the on-open order types but without the possibility to enter Imbalance orders). It is also possible to "flush" the order book before resuming trading according to NASDAQ OMX Member rules.

4.8 Flushing of order books (removal of orders)

The order cancellation policy refers to "Good-till-Cancelled" (GTC) orders entered in an order book on NASDAQ OMX Nordic and First North equity markets in Copenhagen, Helsinki, Iceland, Stockholm, Riga, Tallinn and Vilnius in the event of corporate actions/dividends.

Corporate actions (such as Stock splits and Bonus issues) or dividends in listed companies, causing the market price to be adjusted significantly when taking effect on ex-date, are often subject to fluctuations in the order book during the pre-open session, as GTT orders are entered into the order book at old market price. This can lead to trades being executed at price levels deviating from the current market price.

To minimize the impact of orders that reflect the old price level, the exchanges will flush all orders during the post-trading session, the trading day before a corporate action or dividend with a significant price impact is to take place. The flushing

procedures are intended to protect investors from trading on obsolete terms and to offer security to investors who use the GTC order functionality.

INET Nordic system will also support a supervisory cancel message at order book expiration. This means that the GTC orders residing in an expiring order book will be canceled automatically and a supervisory cancel message will be sent out at the end of the trading day.

- **Flushing criteria**

The exchanges can take action if orders are entered into the order book at prices reflecting the market price before a corporate action or dividend, and when the prices meet the criteria for flushing.

In general, corporate actions and dividends qualify for flushing where:

A corporate action or dividend is expected to have an impact on the price of the security of at least 10% in either direction on ex-date, based on the closing price the previous trading day.

- **Flushing procedure**

The exchanges intervene in a swift and consistent manner based on the given criteria and make a decision as to whether orders are to be flushed, to ensure that the integrity of the market remains intact and that the risk of trades being executed at erroneous prices is minimized.

The exchanges will act according to the following flushing procedure:

All orders in order books qualifying for flushing will be flushed during the post-trading session the trading day before the corporate action or dividend applies (ex-date).

If there is uncertainty regarding the level of expected theoretical price impact or if it cannot be objectively estimated, the exchange reserves the right not to flush order books.

The flushing procedure is applicable for equities listed on NASDAQ OMX Nordic and First North equity markets in Copenhagen, Helsinki, Iceland, Stockholm, Riga, Tallinn and Vilnius.

4.9 Volatility Guards

NASDAQ OMX Nordic Volatility Guards are to reduce the likelihood of trading incidents and to reduce the impact of sudden and extraordinary liquidity.

A Volatility Guard is a trading pause and resumption process designed to restore an orderly market in a single order book traded on NASDAQ OMX Nordic exchanges in Stockholm, Helsinki, Copenhagen, Iceland, Tallinn, Riga and Vilnius.

The Nordic Volatility Guards will be utilized if a proposed trade deviates too much in percentage from the last sale price (Dynamic Volatility Guard) or from the reference price, which is normally the day's opening price (Static Volatility Guard).

When the Volatility Guard is triggered, continuous trading is halted followed by an auction period, after which the order book moves back to continuous trading.

See Appendix M for more details and configuration.

4.10 Pre Trade Risk Management services (PRM)

NASDAQ OMX Nordic Pre-Trade Risk Management is an optional service providing member firms with pre-trade protection.

Using PRM, member firms can set various constraints on orders and control their trading activity and the trading activity of their clients and customers, including prevention of potentially erroneous transactions.

PRM validates orders entered on PRM - enabled ports (OUCH/FIX) prior to allowing them into the matching engine. PRM is flexible, using a set of parameters to determine if the order should be allowed into the market. If rejected, PRM provides customers with clearly defined reasons for rejection. NASDAQ OMX Pre-Trade Risk Management (PRM) service provides:

1. Fat Finger Price Deviation Check
2. Maximum Order Quantity Check
3. Maximum Order Value Check
4. Daily Accumulated Values Checks
5. Restricted Symbol List Check
6. Restricted Market Segment List Check

For a complete description of the PRM service please refer to our member website at: http://nordic.nasdaqomxtrader.com/trading/equities/pre_trade_risk_management/

5 Registration of Manual Trades

For trading on exchange, the member can either make trades in the Order Book or outside the Order Book. In both these cases the trades must be made in accordance with the NASDAQ OMX NORDIC Member Rules. Manual Trades are trades, which are made outside the Order Book as well as reported in accordance with NASDAQ OMX NORDIC Member Rules to the exchange.

Manual trades entered outside normal opening hours need to be reported / published as soon as possible, or in the morning of the following trading day of the trading venue where the instrument is listed. It is possible to report As-of trades (trades older than 1 day) on exchange and will be included in the turnover for the reporting day.

For full description and for details of trade reporting, please refer to the guidelines for trade reporting.

5.1 One-Party Matching Trade Reports

Members are able to report each side of a trade for matching by the exchange. When both parties have reported their side of the trade and the required data matches, a locked-in trade will be created.

5.2 Unmatched Trade Reports

Members or the Exchange can cancel unmatched Trade Reports. Else, unmatched Trade Reports will be cancelled by the system at the end of the trading day (day of entry of this report).

5.3 Two Party Trade Reports

One member is able to report both sides of a trade (internal crossing) when both buyer and seller are represented by the same member firm or if only one part of the trade is a member or if the reporting party is a service provider reporting the trade on behalf of a member (according to special exchange agreement).

5.4 Break Locked-in Trade / Cancel Trade

The entering trade participants are able to cancel trade report submitted trades (however this must be granted by the exchange). In case of matching trade reports, both parties must cancel (break) the trade. In the case of a two party trade report, only the reporting party needs to send in a cancel (break) request.

5.5 Trade Types

The following Trade Types are supported for Manual Trades:

Trade type	Definition
Standard Trade	A Trade concluded on standard market terms in respect of price, time of the trade and with standard delivery and settlement schedule.
Derivative Related Transaction	Exercise or expiration of options, forwards or futures contracts that imply an exchange of securities or a trade that relates to a derivatives trade and that forms an unconditional part of a combination together with a derivative trade.
Portfolio Trade	A transaction in more than one security where those securities are grouped and traded as a single lot against a specific reference price.
Volume weighted average price	A Trade, which price is based on a volume weighted average of trades made within pre-defined time period.
Exchange granted trade	A Trade pursuant to an individual or general authorization from NASDAQ OMX Nordic.
Pre-Opening Trade	A Trade, which is entered into in Pre-Opening on the date of admission to trading of an Instrument (Only applies to NASDAQ OMX Helsinki).

Note: The price of Standard Trades needs to be within the Volume Weighted Average Spread (VWAS).

5.6 Block Trades

Block trades are trades considered large in scale compared to the average daily turnover. They are allowed to be reported outside the volume weighted average spread (VWAS) in the market. The block trade thresholds are:

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 trade qualifying as large in scale compared with normal market size	€ 50 000	€ 100 000	€ 250 000	€ 400 000	€ 500 000

Table 2 Block Trade Thresholds

Standard Trades in shares below the thresholds in the above table have to be made on or within the volume weighted average spread (VWAS). The VWAS is the reference price which would have been paid if the order had been executed in the central Order Book (i.e. would have been the average price if the orders had been auto matched). Standard Trades include all trades made on standard terms, also the ones made above the thresholds in Table 2, and outside the VWAS, if made on standard terms for the specific volume. Although principally the Member needs to make the trade on or within the Spread or VWAS, when there is no Spread, the Member needs to make the trade to a price that takes into account the market situation at the time of the trade.

5.7 Trade publication

For on-exchange trades, NASDAQ OMX Nordic allows waivers from the principle of immediate publication of a reported trade

- if the trade meets the ADT criteria set by MiFID and
- if it is a trade where the member takes on risk.

A request can be made for a trade to be deferred a time period in an incoming trade report. A trade will be deferred if one of the parties requests the trade to be deferred.

A deferred publication table as set by MiFID exists in each local currency and should be referred to for deferred publication rules that apply in each country. An example has been included in Appendix E.

Link to CESR:

http://mifidatabase.cesr.eu/Index.aspx?sectionlinks_id=14&language=0&pageName=MIFIDLiquidSearch&subsection_id=0

For further details, including OTC trade reporting; please refer to the NASDAQ OMX NORDIC Member Rules and the reporting guidelines document (Guidelines for Members On Exchange trade and Members and Non-Members OTC trade Reporting).

6 Orders

6.1 Order types, validity and priority

The following order types, attributes and validity are available on NASDAQ OMX Nordic for Equities and related, and Miscellaneous.

Order Types

1. Limit Order

A Limit order stipulates a maximum purchase price or minimum selling price. If not fully matched, it is logged in the Order Book in descending buy-price order or ascending sell-price order and joins the queue of orders having the same price according to time priority.

If the price specified by a limit price is not valid according to the allowed tick sizes, it will be rounded to a less aggressive price (default) or rejected if that is preferred by the member. It will only execute at prices equal to or more generous than its specified limit price.

2. Market Order

A market price order is an order to sell or buy a stock at the current market price during continuous trading (Trading Hours) with Time-in-Force condition Immediate-or-Cancel (IOC). If used in the auction phase, it ensures participation in the uncross. However, it may not match (partially or fully) in the uncross depending on the market pressure of the order book.

The matching logic of the Market order is that it will hit the opposite side of the book and fill as much as possible at the best price level. Remaining volume will be cancelled, even though more volume is available at less favorable price levels.

To sweep through multiple price levels, a Limit order can be used, where the limit price crosses the BBO.

3. Imbalance Order (IOOP and IOOC)

The imbalance order is an order type that can be used in the auctions. It accepts the equilibrium price reached, based on limit orders and market orders in call auction and fills the theoretical imbalance between the surplus and the deficit side. It does not take part in the equilibrium price determination. Imbalance orders are prioritized among each other according to entry time of the order. Imbalance orders shall not affect the equilibrium price and shall be executed only against any surplus imbalance and not against each other.

Matching at NASDAQ OMX Nordic follows price-internal-display-time or price-display-time. The order type is not part of the prioritization. However, the Imbalance order does imply a certain (i.e. low) priority due to its nature and it is the only exception to the rule. All other orders will be prioritized either in price-internal-display-time order or in price-display-time order.

Imbalance orders cannot be used during Halt auctions.

The imbalance Order comes in two flavors:

Imbalance-on open orders (IOOP)

Provides liquidity intended to offset orders during the opening cross. Imbalance-only orders can only be limit orders. Imbalance-only buy/sell orders only execute at cross of opening call.

Imbalance-on-close orders (IOOC)

Provides liquidity intended to offset orders during the closing uncross. Imbalance-only orders can only be limit orders. Imbalance-only close buy/sell orders only execute at uncross of closing call.

Order Attributes**1. Reserve Order (Iceberg order)**

In a Reserve order, a certain portion of the total volume of an order is not displayed in the Order Book. Both the displayed and non-displayed portions of the Reserve Order are available for potential execution against incoming orders. The non-displayed portion is included in the Order Book dissemination of Net Order Imbalance during the imbalance dissemination preceding the auction.

All changes on the order including changes to the volume (both visible and total volume) of a reserve order are accomplished using an order cancellation followed by an order insert. In addition, when the displayable portion of the order is completely executed within the book, the non-displayable portion of the order is decremented (retaining time priority) and a new displayable order is sent to the order book (with new time priority).

The technical implementation for some order functionality means that the functions are offered on a best effort basis. This means that the execution may be subject to so called 'race conditions' and that the outcome may be impacted by other (incoming) orders. E.g. the updating of open or displayed volume of a reserve order is done at a time when other orders may be entering the order book, thus leaving the order priority of the update non-deterministic.

A partially matched reserve order that is carried over (Time In force = GTC) will automatically get its original displayed quantity when re-entering the trading system the next trading day.

2. Pegged order

Pegged orders allow clients to price orders relative to the current market price for a security.

Offsets allow a client to peg an order with an incremental difference (tick) from the Best Bid Offer of an Order Book (BBO) and can be either positive (higher price) or negative (lower price).

There are three types of pegged orders:

- Primary Peg: Peg an order to the same side of the BBO.
- Market Peg: Peg an order to the opposite side of the BBO.
- Mid-point Peg: Peg an order to the mid-point of the BBO.

Pegged Orders have their price automatically adjusted by the Trading System in response to changes in BBO prices. A Pegged Order may specify a limit price beyond which the order shall not be executed (protection price). Mid-point Pegged Orders will never be displayed. It will only use prices available in the relevant tick size table, i.e. the mid-point peg may round, but always to a less aggressive price. A new timestamp is created for a pegged order each time it is automatically adjusted.

Technical implementation means that pegged order updates are executed via order cancel/insert, thus creating a new timestamp each time a pegged order is automatically adjusted. This means that the execution may be subject to so called race conditions where original order time priority cannot be guaranteed.

In order to secure that a pegged order do not peg towards other pegged orders the system automatically secures that pegged orders only refers to the displayed orders constituting the BBO seen in the public data.

The types of pegging and the incremental difference from the BBO may be used in the following fashion for Bids and Offers.

Pegged orders	Bids: Negative price difference Offers: Positive price difference	Zero difference	Bids: Positive price difference Offers: Negative price difference
Primary peg	Displayed and non-displayed orders	Displayed and non-displayed orders	Non-displayed order
Market peg	Displayed and non-displayed orders For displayed orders, price will be capped by the current BBO*	Available, but converted to an IOC	Available, but converted to an IOC
Mid-point peg	Non-displayed order	Non-displayed order	Available, but converted to an IOC

*Capped by the current BBO means that if a displayed market peg would end up inside the spread it will be automatically adjusted to the best bid or offer. This means that the actual offset may be larger than what was sent in originally. This applies both when the order is first submitted and when the BBO changes.

For example, a bid with a market peg and a negative price difference of 1 tick (i.e. -1), can either be displayed or non-displayed and will be entered into the order book at one tick below the current best offer.

Another example is a pegged order that is pegged to a price less aggressive than the BBO. This means that if the BBO is 100-102, a primary pegged bid order can put itself on best bid minus X ticks. In this example say 4 ticks, resulting in a pegged order with a price of 99 in this case (tick size in this example is 0,25).

A non-display pegged order must meet the large in scale criteria's as any other non-display order. See below. With any price or volume update the order will be validated accordingly. Non-displayed pegged orders that do not meet the criteria's will automatically be converted to an IOC (default behavior), or rejected if that is preferred by the member.

3. Minimum Quantity order

Orders can be entered for execution with a minimum share quantity. Minimum Acceptable Quantity (MAQ) orders are only accepted during continuous trading with a time-in-force IOC (no other Time in Force will be allowed). Adding Minimum Quantity condition to an order and setting this to equal the volume gives the equivalent of a Fill-or-Kill (FOK). Minimum quantity cannot be combined with any other order attribute.

MAQ is however allowed on Non-displayed orders. Here the Non-displayed order would still need to meet LIS criteria, but the trader would be able to state that the order should only match if the MAQ criteria is met or exceeded. An order will not execute during continuous trading unless the MAQ criteria is met. Participants would still be able to enter a Non-displayed order without a MAQ if desired. See Appendix L for more details.

4. Non-displayed order (Hidden order)

Non-displayed limit orders are hidden from other participants than the participant entering it. The order stipulates a maximum purchase price or minimum selling price. If not fully matched, it is logged in the Order Book in descending buy-price order or ascending sell-price order and joins the queue of orders having the same price according to time priority. Visibility is ranked ahead of time priority. A displayed order entered at a later time is ranked ahead of an earlier non-displayed order (assuming both orders entered at the same price).

Non-displayed order has to be large in scale (LIS) at the time of entry. If the volume was reduced due to a partial execution, the order remains non-displayed even when smaller than LIS. Large in scale is defined as specified in the table below:

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

Non-displayed orders that do not meet the LIS criteria will automatically be converted to an IOC (default behavior), or rejected if that is preferred by the member. This validation will also be done when performing an Cancel/Replace on the order.

Link to ESMA:

<http://mifiddatabase.esma.europa.eu/>

The only other attribute that can be used in combination with the Non-display attribute is pegging. In general, the following combinations of order attributes are possible.

	Reserve	Pegged	Minimum qty	Non-displayed
Reserve	-	x		
Pegged	x	-		x
Minimum qty			-	x
Non-displayed		x		-

5. Nordic@Mid order

Nordic@Mid is a separate continuous crossing for non-displayed mid-point pegged orders and should be viewed as a complement to the central order book in NASDAQ OMX Nordic cash equities.

For more information on the service, please refer to Appendix N.

6. Market Maker Order

A Market Maker Order (MMO)⁶ cannot be matched, and create a trade, unless certain conditions are fulfilled. MMOs will be offered to Market Makers on warrants and certificates.

For more information on the service, please refer to Appendix P.

Time in Force

1. Immediate-or-cancel (IOC)

If an IOC (also known as Fill and Kill (FAK)) order is not matched immediately into trade(s) in full or in part upon entry, the remaining part of the order is cancelled. IOC orders can be used during continuous trading and auctions. If Minimum Acceptable

⁶ To be implemented in the trading system by time announced separately by NASDAQ OMX Nordic.

Quantity (MAQ) is specified at a level equal to the total order quantity within an IOC order, the order is effectively handled as a Fill-or-Kill (FOK) Order.

2. Good-till-market close

Order is valid until the close.

3. Good-till-cancelled (GTC)

Order is valid until it is cancelled. If the order is left overnight, it will be inserted again in the order book the next morning at open. The GTC orders will retain their original chronological order based on original entry time into the system. If the order is left for several days, the orders will retain their original chronological order.

4. Good-till-time (GTT)

The Order is valid until a specified time of current day.

5. Day order

A Day order is active for the trading day and any unexecuted portion will be cancelled immediately after the closing cross. Presently, the meaning of Good-till-market close and Day orders is identical.

For those issues that have no closing auction, any unexecuted portion will be cancelled immediately after the move to Closed.

Other conditions**On-open orders**

On-open orders specifically request execution at the opening price of the opening call. They can be specified as market priced (MOO) or limit priced (LOO) orders. MOO and LOO orders can be entered during possible intra-day halt actions as well.

"Limit On Open Order" or "LOO" shall mean an order to buy or sell at a specified price or better that is to be executed only during the Opening Call. LOO Orders will execute only at the price determined by the Opening Call.

"Market on Open Order" or "MOO" shall mean an order to buy or sell at the market that is to be executed only during the Opening Call. MOO orders will execute only at the price determined by the Opening Call.

As the definition of a market order is to price itself aggressively enough to put itself ahead of any competing limit order, the result is that the market order will always have the highest priority when allocating matched shares in the uncross of the call.

Imbalance on open orders, see section 6.1.

On-close orders

On-close orders specifically request execution at the closing price of the closing call. They can be specified as market priced (MOC) or limit priced (LOC) orders.

"Limit On Close Order" or "LOC" shall mean an order to buy or sell at a specified price or better that is to be executed only during the Closing Call. LOC Orders will execute only at the price determined by the Closing Call.

"Market on Close Order" or "MOC" shall mean an order to buy or sell at the market that is to be executed only during the Closing Call. MOC orders will execute only at the price determined by the Closing Call.

As the definition of a market order is to price itself aggressively enough to put itself ahead of any competing limit order, the result is that the market order will always have the highest priority when allocating matched shares in the uncross of the call.

Imbalance on close orders, see section 6.1.

6.2 Order modification

The priority of an order is retained if the volume is reduced. Existing orders cannot be increased in volume without losing time priority but can of course be cancelled and replaced with a new order with new time priority.

NB. All reserve order updates are always executed via order cancel/insert, thus creating a new time priority. A new timestamp is created for the replenished portion of the order each time it is replenished from reserve, while the reserve portion retains the timestamp of its original entry.

6.3 Order price

If a price is needed, it is expressed in monetary amount e.g. SEK, EUR. Pegged orders and market orders do not include a numeric price value.

6.4 Tick sizes

Tick size is the smallest allowed price movement and is thereby also the smallest possible difference between the buy and sell price in a share, "minimum spread". Only very liquid shares are usually traded on the minimum spread.

Example of the tick sizes can be found in Appendix F. Please refer to the NASDAQ OMX Website for current tables.

Given the tick size specifications, it is worth noting that trades will be displayed with four decimals (five is possible on Manual trades).

If the price specified by a limit price is not valid according to the allowed tick sizes, it will be rounded to a less aggressive price (default) or rejected if that is preferred by the member.

6.5 Trading capacity information

When a member enters an order, it must also indicate the party on whose behalf such order is given. The trading capacity is expressed with an owner category. Such owner categories consist of trades for the member's own account, trades executed for a client,

trades by listed companies i.e. repurchase or disposal of the issuer's own shares, trades executed by the member as a market maker and trades executed in the context of initial public offerings in order to support the market price for a predetermined time. Thus, the available categories are: own account, client, issuer holdings, market maker, riskless principal and issue price stabilization. Owner category must also be given when reporting manual trades.

7 Order Routing

NASDAQ OMX Nordic offers Smart Order Routing to away markets trading Nordic shares. The objective is to provide order routing to access the away markets while mitigating both transaction and post-trade costs to the member.

The requirements for order routing (membership, technology and infrastructure) are all part of the offering. When a routable order is sent to NASDAQ OMX Nordic, it will be managed according to the submitted routing strategy.

Routing is optional and a separate Application form needs to be signed by the member. For further details, please refer to Appendix O.

Revision History

Date	Revision	Change Description
October 3, 2008	1.0	Initial version for NASDAQ OMX Nordic
November 17, 2008	1.0.1	New opening and closing call design
December 23	1.0.2	Minor updates and clarifications
February 13, 2009	1.0.3	Discretionary orders to be implemented in a later phase ETC currently has no active order books
March 12, 2009	1.0.4	OMX STO Equities NOK added in schedule Detail in Appendix D corrected Discretionary order removed completely since they are not allowed by the authorities
May 19, 2009	1.0.5	Minor updates and clarifications. Pegging logics further described
June 1, 2009	1.0.6	Market order logics explained. Icelandic times updated.
September 7 , 2009	1.0.7	Norwegian schedule updated. All IOCs are not displayed in market by order in pre-open and pre-close Non-displayed orders that do not meet the LIS criteria will automatically be converted to an IOC or rejected Price validation updated. Pegged and Reserve orders clarified Other minor updates in text and examples
November 2, 2009	1.0.8	Helsinki convertibles not to migrate Clarification that Imbalance orders not to participate in forming the equilibrium price Pegged orders clarified that a displayed market peg would end up inside the spread it will be automatically adjusted to the best bid or offer Off tick size priced orders can be rounded or rejected Call only orders not available as a specific condition. It is however possible to enter On-open, On-close and in case of an halt auction orders only eligible for that event Tick size tables updated to reflect latest changes Other minor updates in text and examples
January 21, 2010	1.1	Icelandic trading schedule updated. Closing auction at CET 16:30. Other minor clarifications and editorial in text and examples:

Date	Revision	Change Description
		<ul style="list-style-type: none"> - At closing auction, un-cross will take place randomly among order books the last 30 seconds before moving into Post-trade - Expired orders are deleted when entering Post trade - Deferred trade reports cannot be released in post trade - Imbalance orders are not allowed during intra-day calls - A partially matched reserve order that is carried over will get its original displayed quantity when re-entered the next trading day - Tick sizes updates to reflect current setup in SAXESS - Baltic non-trading days for 2010 updated - Information on logics for setting closing prices and trade statistics
February 17, 2010	1.2	Clarifications: <ul style="list-style-type: none"> - Stockholm and Helsinki Warrants, Stockholm and Helsinki Equity rights, subscr.opt, Convertibles, Fund Units moves into Post-trade at CET 17:25 (no auction) - Remaining Day orders in order books without closing auction are being cancelled when the Market segment moves into closed
April 20, 2010	1.3	<ul style="list-style-type: none"> - Change of Tick size table for Danish Certificates (effective by March 22, 2010) - Support for Minimum Acceptable Quantity (MAQ) on non-displayed orders - Support for supervisory cancel message at order book expiration
May 31, 2010	1.4	Clarification on Pre-Trade Risk Management services and order routing New TZ table for large cap
June 10, 2010	1.5	Removal of closing auction for Danish warrants and certificates
August 16, 2010	1.6	Updates to the chapter on Pre trade Risk Management (PRM) and a new section on Volatility Guards. References to ATP listen removed.
October 11, 2010	1.7	Updates on <ul style="list-style-type: none"> - Nordic@Mid order - Smart Order Routing - Trading calendar for 2011-2012 - Baltic Tick size updated - First North Tick size tables added

Date	Revision	Change Description
November 11, 2010	1.7	Clarifications on Nordic@Mid and pegged orders functionality regarding automatic order price update.
November 19, 2010	1.8	Update to Appendix N on post-trade transparency for Nordic@Mid. OMXC20 will have post-trade transparency.
January 24, 2011	1.9	Clarification in section 4.5 about the Post trading session. Updates and clarifications on Appendix F and I on tick sizes for Equities SEK, Most Liquid, XHEL Equities EUR, FESE2 and XCSE Equities DKK, FESE2 and on non-trading days.
January 24, 2011	1.9	Nordic Order Routing is approved by the Authorities and earlier disclaimer removed.
February 28, 2011	2.0	Nordic Order Routing clarifications like information on valid order types and time in force. New order type Market Maker Order is introduced with an associated Appendix P. Updated tick size table for OMX HEL Equity Subscriptions rights.
March 21, 2011	2.1	Updates to Order routing on the new strategy "STGY" and GTC support. New trading schedule for warrants trading in the Baltics (from April 4). Updates to the PRM service.
April 1, 2011	2.2	Updates to Tick sizes FESE 2 effective April 1, 2011 New Tick size for currency based ETFs effective April 4, 2011 New First North Finland effective April 4, 2011

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Appendix A: Call examples

Rule 1. Maximum tradable quantity

The following examples illustrate the case when the maximum tradable quantity principle is used in price determination.

Example 1:

Assume Stock E has the following characteristics:

Price tick: 0.10

Assume the following aggregated book:

Buy								Ask	Paired	Imbalance
Cum	IO	OC / OO	Limit Qty	Price	Limit Qty	OC / OO	IO	Cum	All	All
-				MP				116,000	0	-116000
-				54.5	100000			116,000	0	-116000
-				54.40	10000			16,000	0	-16000
5,000		5000		54.30	3000			6,000	5000	-1000
5,000				54.20		1000		3,000	3000	2000
5,000				54.10		1000		2,000	2000	3000
5,000				54.00				1,000	1000	4000
9,000		4000		53.90				1,000	1000	8000
12,000		3000		53.80		1000		1,000	1000	11000
14,000			2000	53.70				-	0	14000
24,000			10000	53.60				-	0	24000
124,000			100000	53.50				-	0	124000
124,000				MP				-	0	124000

OC / OO are On-Close or On-Open conditioned orders.

Limit Qty is the regular limit order that will be part of calls and the continuous matching.

In this example the maximum tradable volume is at 54.30 which is selected as Equilibrium Price (EP)



Imbalance information

Normal Order Imbalance Indicator NOII is disseminated during the last minutes of all calls containing information about the indicative EP. The NOII information in this case would be:

Field	Value	Comment
Paired Quantity	5 000	Total paired Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Quantity	1 000	Imbalance Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Direction	Sell	
Equilibrium Price (EP)	54.30	
Best Bid Price	54.30	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Ask Price	54.30	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Bid Qty	5 000	Aggregated volume at Best Bid
Best Ask Qty	6 000	Aggregated volume at Best Ask

Order transfer

Unmatched On-Open orders will not enter the continuous market.

Rule 2. Minimum imbalance (The following examples illustrate the principle is used in price determination (rule 2)). **Example 2:**

the case when the minimum imbalance

Buy Cum	IO	OC / OO	Limit Qty	Price	Limit Qty	OC / OO	IO	Ask Cum	Paired All	Imbalance All
-				MP				116,500	0	-116500
-				54.5	100000			116,500	0	-116500
-				54.40	10000			16,500	0	-16500
-				54.30	3000			6,500	0	-6500
5,000		5000		54.20				3,500	3500	1500
10,000		5000		54.10	1000	1500		3,500	3500	6500
10,000				54.00				1,000	1000	9000
14,000		4000		53.90				1,000	1000	13000
17,000		3000		53.80		1000		1,000	1000	16000
19,000			2000	53.70				-	0	19000
29,000			10000	53.60				-	0	29000
129,000			100000	53.50				-	0	129000
129,000				MP				-	0	129000

The tradable volume is equal on 54.20 and 54.10 but the imbalance smaller at 54.20.

Imbalance information:

Field	Value	Comment
Paired Quantity	3 500	Total paired Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Quantity	1 500	Imbalance Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Direction	Buy	
Equilibrium Price (EP)	54.20	
Best Bid Price	54.20	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Ask Price	54.20	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Bid Qty	5 000	Aggregated volume at Best Bid
Best Ask Qty	3 500	Aggregated volume at Best Ask

Rule 3. Market pressure principle

The following example illustrates the case when there are several price levels that fulfill the maximum volume and minimum imbalance criteria and the surpluses are the same. In this case, the price level that would leave volume is the equilibrium price - market pressure.

Example 3:

Buy Cum	IO	OC / OO	Limit Qty	Price	Limit Qty	OC / OO	IO	Ask Cum	Paired All	Imbalance All
-				MP				116,500	0	-116500
-				54.5	100000			116,500	0	-116500
-				54.40	10000			16,500	0	-16500
-				54.30	3000			6,500	0	-6500
5,000		5000		54.20				3,500	3500	1500
5,000				54.10	1000	1500		3,500	3500	1500
10,000		5000		54.00				1,000	1000	9000
14,000		4000		53.90				1,000	1000	13000
17,000		3000		53.80		1000		1,000	1000	16000
19,000			2000	53.70				-	0	19000
29,000			10000	53.60				-	0	29000
129,000			100000	53.50				-	0	129000
129,000				MP				-	0	129000

Both maximum tradable volume and imbalance is equal for 54.20 and 54.10, As there is a bid market pressure the highest price will be selected.

Imbalance information:

Field	Value	Comment
Paired Quantity	3 500	Total paired Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Quantity	1 500	Imbalance Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Direction	Buy	
Equilibrium Price (EP)	54.20	
Best Bid Price	54.20	In case the market is not crossed this will show the spread, in this case shows the EP.
Best Ask Price	54.20	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Bid Qty	5 000	Aggregated volume at Best Bid
Best Ask Qty	3 500	Aggregated volume at Best Ask

Rule 4. Prices that are equally close to zero imbalance

If there are several price levels that fulfill the maximum tradable and minimum imbalance criteria and

- the surpluses have different signs (positive and negative) or,
- there is more than one price level that have 0 imbalance,

The equilibrium price is chosen to be the mean price between the highest price level lowest price level from step 3. If price is off-tick it will be rounded to the closest tick, if the price is equally close to 2 ticks then it will be rounded down.

Example 4a – Imbalance shift signs:

Buy Cum	IO	OC / OO	Limit Qty	Price	Limit Qty	OC / OO	IO	Ask Cum	Paired All	Imbalance All
-				MP				117,000	0	-117000
-				54.5	100000			117,000	0	-117000
-				54.40	10000			17,000	0	-17000
-				54.30	3000			7,000	0	-7000
-				54.20				4,000	0	-4000
1,500		1500		54.10	1000			4,000	1500	-2500
2,000		500		54.00		1000		3,000	2000	-1000
3,000		1000		53.90				2,000	2000	1000
6,000		3000		53.80		2000		2,000	2000	4000
8,000			2000	53.70				-	0	8000
18,000			10000	53.60				-	0	18000
118,000			100000	53.50				-	0	118000
118,000				MP				-	0	118000

In this case the uncross price is the mean 54.00 and 53.90 which is equal to 53.95, since this equally close valid ticks it will be rounded down to 53.90



Imbalance information

Market by Order is disseminated and will show only orders from the continuous book. The Normal Order Imbalance Indicator NOII includes information implying the hidden on-close quantity. The NOII information in this case would be:

Field	Value	Comment
Paired Quantity	2 000	Total paired Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Quantity	1 000	Imbalance Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Direction	Buy	
Equilibrium Price (EP)	53.90	
Best Bid Price	53.90	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Ask Price	53.90	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Bid Qty	3 000	Aggregated volume at Best Bid
Best Ask Qty	2 000	Aggregated volume at Best Ask

Example 4b– Range of zero imbalances:

Buy Cum	IO	OC / OO	Limit Qty	Price	Limit Qty	OC / OO	IO	Ask Cum	Paired All	Imbalance All
-				MP				118,000	0	-118000
-				54.5	100000			118,000	0	-118000
-				54.40	10000			18,000	0	-18000
-				54.30	3000			8,000	0	-8000
1,500		1500		54.20	1000			5,000	1500	-3500
2,000		500		54.10	1000	1000		4,000	2000	-2000
2,000				54.00				2,000	2000	0
2,000				53.90				2,000	2000	0
2,000				53.80				2,000	2000	0
3,000			1000	53.70				2,000	2000	1000
6,000			3000	53.60		2000		2,000	2000	4000
106,000			100000	53.50				-	0	106000
106,000				MP				-	0	106000

In this case the uncross price is the mean 54.00 and 53.80 which is equal to 53.90, since this on tick EP will be 53.90

Imbalance information:

Field	Value	Comment
Paired Quantity	2 000	Total paired Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Quantity	0	Imbalance Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Direction	Buy	
Equilibrium Price (EP)	53.90	
Best Bid Price	53.90	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Ask Price	53.90	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Bid Qty	2 000	Aggregated volume at Best Bid
Best Ask Qty	2 000	Aggregated volume at Best Ask

Example 5 –NOII in an uncrossed market:



Assume the following book:

Buy								Ask	Paired	Imbalance
Cum	IO	OC / OO	Limit Qty	Price	Limit Qty	OC / OO	IO	Cum	All	All
-				MP				116,000	0	-116000
-				54.5	100000			116,000	0	-116000
-				54.40	10000			16,000	0	-16000
-				54.30	3000			6,000	0	-6000
-				54.20	1000			3,000	0	-3000
-				54.10	1000	1000		2,000	0	-2000
-				54.00				-	0	0
-				53.90				-	0	0
-				53.80				-	0	0
6,000		5000	1000	53.70				-	0	6000
9,000			3000	53.60				-	0	9000
109,000			100000	53.50				-	0	109000
109,000				MP				-	0	109000

Imbalance information:

Field	Value	Comment
Paired Quantity	0	Total paired Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Quantity	0	Imbalance Qty at Equilibrium Price, including all orders and hidden qty.
Imbalance Direction	N/A	
Equilibrium Price (EP)	N/A	
Best Bid Price	53.70	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Ask Price	54.10	In case the market is not crossed this will show the spread, in this case it shows the EP.
Best Bid Qty	6 000	Aggregated volume at Best Bid
Best Ask Qty	2 000	Aggregated volume at Best Ask

The NOII information then indicates the spread in the market including hidden volume.

Example 6 - Share allocation

Similar to example 1 the aggregated book is based on the following order book:

Order book

Bid				Ask			
Order#	Time	Volume	Price	Price	Volume	Time	Order#
1	b1	0(3000)	54.30	53.80	0(1000)	a4	11
5	b5	0(2000)	54.30	54.10	0(500)	a1	8
2	b2	0(1500)	53.90	54.10	0(500)	a3	10
4	b4	0(2500)	53.90	54.20	0(1000)	a2	9
3	b3	0(500)	53.80	54.30	350	a5	12
6	B6	0(2500)	53.80	54.30	2650	a6	13
7	B7	2000	53.70				



This will create the following aggregated quantities:

Buy Cum	IO	OC / OO	Limit Qty	Price	Limit Qty	OC / OO	IO	Ask Cum	Paired All	Imbalance All
-				MP				6,000	0	-6000
-				54.5				6,000	0	-6000
-				54.40				6,000	0	-6000
5,000		5000		54.30	3000			6,000	5000	-1000
5,000				54.20		1000		3,000	3000	2000
5,000				54.10		1000		2,000	2000	3000
5,000				54.00				1,000	1000	4000
9,000		4000		53.90				1,000	1000	8000
12,000		3000		53.80		1000		1,000	1000	11000
14,000			2000	53.70				-	0	14000
14,000				53.60				-	0	14000
14,000				53.50				-	0	14000
14,000				MP				-	0	14000

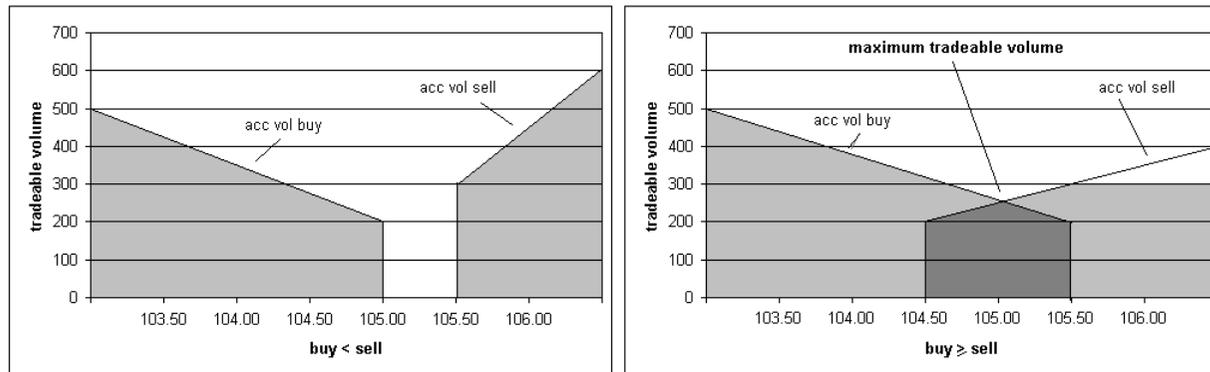
Matching will start from the deficit side, in this case the bid side. In case of internal matching these will be sought out first, however in this example we assume no internal matches.

The following trades will be generated:

Order #	Price	Qty
1 - 11	54.30	1 000
1 - 8	54.30	500
1 - 10	54.30	500
1 - 9	54.30	1 000
5- 12	54.30	350
5- 13	54.30	1650

Equilibrium Price Determination – graphical example

The figure below shows supply (turn-S) and demand curves (turn-B) for two different cases. In one case (left), the best buy price is less than (<) the best sell price. In the other case (right), the buy price is higher than (>) the best price.



The equilibrium price is set to the price where the biggest volume can be traded i.e. where both curves meet (in the right-hand example above). If the curves do not meet (as in the left-hand example above), there is no equilibrium price.

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Appendix B: Matching examples, price-internal-displayed-time priority and Market orders

1. Internal priority without Reserve orders

The following buy orders are entered into the Order Book in the following sequence.

Bid						Ask					
Order#	Time	Member	Display volume	Reserve volume	Price	Price	Reserve volume	Display volume	Member	Time	Order#
1	1	AAA	75000		15,00						
2	2	BBB	15000		15,00						
3	3	AAA	35000		14,90						

An ask order is entered by Member BBB. Order #4, 50000@14,90.

The following trades are matched according to price-internal-time priority.

Order #2/4 - 15000@15,00

Order #1/4 - 35000@15,00

The following orders remain in the Order Book.

Bid						Ask					
Order#	Time	Member	Display volume	Reserve volume	Price	Price	Reserve volume	Display volume	Member	Time	Order#
1	1	AAA	40000		15,00						
3	3	AAA	35000		14,90						

2. Internal priority with Reserve orders

Remarks: When Reserve order is matched with another order, each new open quantity has a new timestamp.

The following buy orders are entered into the Order Book. Order #2 is a reserve order with total volume of 50000 shares and instructions to display (d) 15000 shares and hidden (h) 35000 shares

Bid						Ask					
Order#	Time	Member	Display volume	Reserve volume	Price	Price	Reserve volume	Display volume	Member	Time	Order#
1	1	AAA	40000		15,00						
2d	2	BBB	15000		15,00						
3	3	AAA	5000		15,00						
2h	2	BBB		35000							
4	4	CCC	35000		14,90						

An ask order is entered by Member BBB. Order #5, 45000@14,90.

The following trades are matched according to price-internal-time priority.

Order #2/5 - 15000@15,00

Order #2/5 - 30000@15,00

The following orders remain in the Order Book.

Bid						Ask					
Order#	Time	Member	Display volume	Reserve volume	Price	Price	Reserve volume	Display volume	Member	Time	Order#
1	1	AAA	40000		15,00						
3	2	AAA	5000		15,00						
2	3	BBB	5000		15,00						
4	4	CCC	35000		14,90						

An ask order is entered by Member CCC. Order #6, 50000@14,90.

The following trades are matched according to price-internal-time priority.

Order #1/6 - 40000@15,00

Order #3/6 - 5000@15,00

Order #2/6 - 5000@15,00

And finally, the following buy order is remaining after matching.

Bid						Ask					
Order#	Time	Member	Display volume	Reserve volume	Price	Price	Reserve volume	Display volume	Member	Time	Order#
4	4	CCC	35000		14,90						

3. Market orders

A. Market order logics

Current order book, continuous trading, BBO = 9,00-9,03

Bid					Ask				
Order#	Time	Non-display volume	Display volume	Price	Price	Non-Display volume	display volume	Time	Order#
1	1		200	9,00	9,03	300		6	6
2	2		300	8,98	9,04	500		7	7
3	3		200	8,98	9,05	1000		8	8
4	4		200	8,90					
5	5		100	8,70					

A Bid Market order #9 2000@MP is entered

Order book after event

Bid					Ask				
Order#	Time	Non-display volume	Display volume	Price	Price	Non-Display volume	display volume	Time	Order#
1	1		200	9,00	9,04	500		7	7
2	2		300	8,98	9,05	1000		8	8
3	3		200	8,98					
4	4		200	8,90					
5	5		100	8,70					

Trades: Order #9/6 – 300@9,03

B. Limit IOC

To sweep through multiple price levels, a Limit IOC order can be used, where the limit price is crosses the BBO.

Current order book, continuous trading, BBO = 9,00-9,03

Bid					Ask				
Order#	Time	Non-display	Display	Price	Price	Non-Display	display	Time	Order#
		volume	volume			volume	volume		
1	1		200	9,00	9,03	300		6	6
2	2		300	8,98	9,04	500		7	7
3	3		200	8,98	9,05	1000		8	8
4	4		200	8,90					
5	5		100	8,70					

A Limit IOC order #9 1000@10,00 is entered

Order book after event

Bid					Ask				
Order#	Time	Non-display	Display	Price	Price	Non-Display	display	Time	Order#
		volume	volume			volume	volume		
1	1		200	9,00	9,05	800		8	8
2	2		300	8,98					
3	3		200	8,98					
4	4		200	8,90					
5	5		100	8,70					

Trades: Order #9/6 – 300@9,03
 Order #9/7 – 500@9,04
 Order #9/8 – 200@9,05

Appendix C: Matching examples, Reserve and Hidden orders

Building order book on ask side

All orders entered during continuous trading in the following order

1. Sell 1000 at 9.00 SEK, 100 displayed
2. Sell 200 @ 9.00 SEK
3. Sell 200 @ 9.00 SEK, all hidden
4. Sell 400 @ 9.00 SEK, 100 displayed

Order book after event:

Bid						Ask					
Order#	Reserve /hidden time	Reserve /hidden Time	Display volume	Display volume	Price	Price	Display volume	Reserve /hidden volume	Reserve /hidden Time	Reserve /hidden time	Order#
						9,00	100	900 R	1a	1b	1
						9,00	200		2		2
						9,00		200 H		3	3
						9,00	100	300 R	4a	4b	4

Please note that Reserve orders are assigned two time priorities when they are entered into the book – one for the displayed portion and one for the hidden quantity. In the tables above, this is indicated using (a) and (b).

Please also note that hidden orders have to be large in scale (LIS) at the time of entry. This is not the case in the examples.

Example 1:

State of the order book on the ask side

At price level 9.00 SEK we have the following:

- 400 display,
- 1,200 reserve, and
- 200 hidden

Bid						Ask						
Order#	Reserve /hidden		Reserve /hidden		Display volume	Price	Price	Reserve /hidden		Reserve /hidden		Order#
	time	Time	volume	volume				Display volume	Time	time		
						9,00	100	900 R		1a	1b	1
						9,00	200			2		2
						9,00		200 H			3	3
						9,00	100	300 R		4a	4b	4

Assume a bid order comes in for 1,800 shares @ 9.00 SEK

Allocation

First from displayed volumes

- 1) 100 shares from order number 1a
- 2) 200 shares from order number 2
- 3) 100 shares from order number 4a

Then from Reserved / Hidden quantity

- 4) 900 shares from order number 1b
- 5) 200 shares from order number 3
- 6) 300 shares from order number 4b

Trades

Takes place in following order (same as allocation)

- 1) 100 shares from order number 1a
- 2) 200 shares from order number 2
- 3) 100 shares from order number 4a
- 4) 900 shares from order number 1b
- 5) 200 shares from order number 3
- 6) 300 shares from order number 4b

The remaining book will be empty since all volume, displayed and hidden, been matched.

Example 2:

State of the order book on the ask side

At price level 9.00 SEK we have the following:

- 400 display,
- 1,200 reserve, and
- 200 hidden

Bid						Ask					
Order#	Reserve /hidden time	Reserve /hidden Time	Display volume	Display volume	Price	Price	Display volume	Reserve /hidden volume	Reserve /hidden Time	Reserve /hidden time	Order#
						9,00	100	900 R	1a	1b	1
						9,00	200		2		2
						9,00		200 H		3	3
						9,00	100	300 R	4a	4b	4

Assume a bid order comes in for 250 shares at 9 SEK

Allocation

First from displayed volumes

- 1) 100 shares from order number 1
- 2) 150 shares from order number 2

Order #1 will be refreshed with 100 shares from reserve

Trades

Takes place in following order

- 1) 100 shares from order number 1
- 2) 150 shares from order number 2

Book will now look like this:

Bid						Ask					
Order#	Reserve /hidden time	Reserve /hidden Time	Display volume	Display volume	Price	Price	Display volume	Reserve /hidden volume	Reserve /hidden Time	Reserve /hidden time	Order#
						9,00	50		2		2
						9,00		200 H		3	3
						9,00	100	300 R	4a	4b	4
						9,00	100	800 R	5	1b	1

Detail:

- The reserve element of order #1 retains time priority. The iceberg refresh is entered as a new order #5.
- The remaining quantity of order #2 retains time priority
- No change to the completely hidden order priority

Example 3:

State of the order book on the ask side

At price level 9.00 SEK we have the following:

- 400 display,
- 1,200 reserve, and
- 200 hidden

Bid						Ask					
Order#	Reserve /hidden		Display volume	Price		Price	Reserve		Time		Order#
	time	Time					volume	Time			
						9,00	100	900 R	1a	1b	1
						9,00	200		2		2
						9,00		200 H		3	3
						9,00	100	300 R	4a	4b	4

Assume a bid order comes in for 1200 shares at 9.00 SEK

Allocation

First from display

- 1) 100 shares from order number 1a
- 2) 200 shares from order number 2
- 3) 100 shares from order number 4a

Then from Reserved / Hidden quantity

- 4) 800 shares from order number 1's reserve pool (1b)

Trades

Take place in following order

- 1) 100 shares from order number 1a
- 2) 200 shares from order number 2
- 3) 100 shares from order number 4a
- 4) 800 shares from order number 1's reserve pool (1b)

Book will now look like this:

Bid						Ask					
Order#	Reserve /hidden time	Reserve /hidden Time	Display volume	Display volume	Price	Price	Reserve Display volume	Reserve /hidden volume	Time	Reserve /hidden time	Order#
						9,00	100		5		1
						9,00	100	200 R	6	4b	4
						9,00		200 H		3	3

Detail:

- Order #1 will be refreshed with remaining 100 shares from reserve. The reserve is now depleted and the refresh is given priority "5" in the book.
- Order #2 has been fully executed.
- Order #3 retains priority
- The displayed element of order #4 was matched, the reserve element maintains priority, the refreshed display order is given priority "6"

Appendix D: Pegged orders

Pegged orders allow a pricing of the orders relative to the current market price defined as Best Bid Offer (BBO). NB. Non-display must meet Large in scale criteria except Nordic@Mid orders. This is not reflected in the examples below.

Tick size is 0,01 in the following examples.

1. Current order book, continuous trading, BBO = 9,00-9,03

Bid					Ask				
Order#	Time	Non-display volume	Display volume	Price	Price	Non-Display volume	display volume	Time	Order#
1	1		200	9,00	9,03	300		6	6
2	2		300	8,98	9,04	500		7	7
3	3		200	8,98	9,05	1000		8	8
4	4		200	8,90					
5	5		100	8,70					

2. A bid primary non-displayed peg order #9 200@Best Bid + 0,02 (2 ticks) is entered, meaning actively trading @9,02, BBO = 9,00-9,03

Order book after event:

Bid					Ask				
Order#	Time	Non-display volume	Display volume	Price	Price	Non-Display volume	display volume	Time	Order#
				9,02 (Primary + 0,02)					
9	9	200			9,03	300		6	6
1	1		200	9,00	9,04	500		7	7
2	2		300	8,98	9,05	1000		8	8
3	3		200	8,98					
4	4		200	8,90					
5	5		100	8,70					

3. An ask is entered, order #10, 100@9,00, BBO = 9,00-9,03

Order #10, 100@9,00 hits the best price, which is the non-display order #9

Order book after event:

Bid					Ask				
Order#	Time	Non-display volume	Display volume	Price	Price	Non-Display volume	Non-display display volume	Time	Order#
				9,02 (Primary + 0,02)					
9	9	100			9,03	300		6	6
1	1		200	9,00	9,04	500		7	7
2	2		300	8,98	9,05	1000		8	8
3	3		200	8,98					
4	4		200	8,90					
5	5		100	8,70					

Trades: Order #10/9 – 100@9,02

4. A new ask is entered, order #11, 50@9,01 which is within the price range, BBO = 9,00-9,03

Order #9 is partially filled

Order book after event:

Bid					Ask				
Order#	Time	Non-display volume	Display volume	Price	Price	Non-Display volume	Non-display display volume	Time	Order#
				9,02 (Primary + 0,02)					
9	9	50			9,03	300		6	6
1	1		200	9,00	9,04	500		7	7
2	2		300	8,98	9,05	1000		8	8
3	3		200	8,98					
4	4		200	8,90					
5	5		100	8,70					

Trades: Order #11/9 – 50@9,02

5. Order #1 is cancelled, new bid is entered, order #12, 100@9,01, BBO = 9,01-9,03

This means that order #9 is cancelled and a new pegged order is sent in based on the new best bid. Order #13, 50@ Best bid + 0,02 (9,03 and within the price range of order #6)

Order #13 will match with Order #6

Order book after event:

Bid					Ask				
Order#	Time	Non-display volume	Display volume	Price	Price	Non-Display volume	display volume	Time	Order#
12	12		100	9,01	9,03	250		6	6
2	2		300	8,98	9,04	500		7	7
3	3		200	8,98	9,05	1000		8	8
4	4		200	8,90					
5	5		100	8,70					

Trades: Order #13/6 – 50@9,03

6. Other pegging scenarios

1. A bid market peg order #12 100@Best Offer - 0,02 is entered meaning actively trading @ 9,01 (non-displayed)

2. A bid market peg order #13 200@Best Offer - 0,03 is entered meaning actively trading @9,00 (displayed)

3. A bid mid-point peg order #14 500 @ - 0,00 is entered meaning actively trading @9,02 (non-displayed)

Order book after event: BBO = 9.01-9,03

Bid					Ask				
Order#	Time	Non-display volume	Display volume	Price	Price	Non-Display volume	display volume	Time	Order#
				9,02					
14	14	500		(Midpoint)	9,03	200		6	6
1	1		100	9,01	9,04	500		7	7
				9,01					
12	12	100		(Market - 0,02)	9,05	1000		8	8
				9,00					
13	13		200	(Market - 0,03)					
2	2		300	8,98					
3	3		200	8,98					

Order #1 is removed. Order #14 is now rounded to a less aggressive price with a new timestamp.

Order book after event:

Bid					Ask				
Order#	Time	Non-display volume	Display volume	Price	Price	Non-Display volume	display volume	Time	Order#
				9,01 (Market -					
12	12	100		0,02)	9,03	200		6	6
				9,01 (Midpoint)					
14	15	500		9,00 (Market -	9,04	500		7	7
				0,03)					
13	13		200	8,98	9,05	1000		8	8
2	2		300	8,98					
3	3		200	8,98					

Appendix E: Example deferred publication table

		Class of shares in terms of average daily turnover (ADT)			
		ADT < EUR 100 000	EUR 100 000 ≤ ADT < EUR 1000 000	EUR 1000 000 ≤ ADT < EUR 50 000 000	ADT ≥ EUR 50 000 000
		Minimum qualifying size of transaction for permitted delay			
Permitted delay for publication	60 minutes	EUR 10 000	Greater of 5% of ADT and EUR 25 000	Lower of 10% of ADT and EUR 3 500 000	Lower of 10% of ADT and EUR 7 500 000
	180 minutes	EUR 25 000	Greater of 15% of ADT and EUR 75 000	Lower of 15% of ADT and EUR 5 000 000	Lower of 20 % of ADT and EUR 15 000 000
		Class of shares in terms of average daily turnover (ADT)			
		ADT < EUR 100 000	EUR 100 000 ≤ ADT < EUR 1000 000	EUR 1000 000 ≤ ADT < EUR 50 000 000	ADT ≥ EUR 50 000 000
		Minimum qualifying size of transaction for permitted delay			
Permitted delay for publication	Until end of trading day (or roll-over to noon of next trading day if trade undertaken in final two hours of trading day)	EUR 45 000	Greater of 25 % of ADT and EUR 100 000	Lower of 25 % of ADT and EUR 10 000 000	Lower of 30 % of ADT and EUR 30 000 000
	Until end of trading day next after trade	EUR 60 000	Greater of 50 % of ADT and EUR 100 000	Greater of 50 % of ADT and EUR 1000 000	100 %
	Until end of second trading day next after trade	EUR 80 000	100 % of ADT	100 % of ADT	250 % of ADT
	Until end of third trading day next after trade		250 % of ADT	250 % of ADT	

Appendix F: Tick size tables

The tick sizes for instruments listed on the main market within NASDAQ OMX Nordic exchanges are as follows:

Exchange	Category	Tick size	
NASDAQ OMX Copenhagen	<i>XCSE Equities DKK, FESE2 (Equities –Large Cap and OMXC20)</i>		
	0.0000 - 0.4999	0.0001	
	0.5000 - 0.9995	0.0005	
	1.0000 - 1.9990	0.0010	
	2.0000 - 4.9980	0.0020	
	5.0000 - 9,9950	0.0050	
	10.0000 - 49,9900	0.0100	
	50.0000 - 99,9500	0.0500	
	100.0000 - 499,9000	0.1000	
	500.0000 - 999,5000	0.5000	
	1,000.0000 - 4,999.0000	1.0000	
	5,000.0000 - 9,995.0000	5.0000	
	10,000.0000 - 19,990.0000	10.0000	
	20,000.0000 - 39,980.0000	20.0000	
	40,000.0000 - 49,960.0000	40.0000	
	50,000.0000 - 79,950.0000	50.0000	
	80,000.0000 - 99,920.0000	80.0000	
	100,000.000 -	100.0000	
		<i>XCSE Equities, DKK (other equities and rights)</i>	
	0.00 - 4.99	0.01	
	5.00 - 9.95	0.05	
	10.00 - 49.90	0.10	
	50.00 - 499.50	0.50	
	500.00 - 4,999.00	1.00	
	5,000.00 - 19,990.00	10.00	
	20,000.00 -	100.00	
		<i>Warrants</i>	
	0.00 - 4.99	0.01	
	5.00 - 9.95	0.05	
	10.00 - 49.90	0.10	
	50.00 - 499.50	0.50	

500.00 – 4,999.00	1.00
5,000.00 – 19,990.00	10.00
20,000.00 -	100.00

Certificates, DKK

Same as for equities or;

0.00 – 99.99	0.01
100.00 – 499.95	0.05
500.00 -	0.10

XCSE UTC, EUR/USD

(Collective Investment Undertakings)

0.00 – 1,999.99	0.01
2,000.00 – 9,999.90	0.10
10,000.00 -	1.00

Equity Rights

0.00 – 999.95	0.05
1,000.00 – 9,999.75	0.25
10,000.00 – 49,999	1.00

NASDAQ OMX Stockholm

Equities, SEK Most Liquid

(Equities – Large Cap and OMXS30 – FESE2)

0.0000 - 0.4999	0.0001
0.5000 - 0.9995	0.0005
1.0000 - 1.9990	0.0010
2.0000 - 4.9980	0.0020
5.0000 - 9,9950	0.0050
10.0000 - 49.9900	0.0100
50.0000 - 99.9500	0.0500
100.0000 - 499.9000	0.1000
500.0000 - 999.5000	0.5000
1,000.0000 - 4,999.0000	1.0000
5,000.0000 - 9,995.0000	5.0000
10,000.0000 - 19,990.0000	10.0000
20,000.0000 - 39,980.0000	20.0000
40,000.0000 - 49,960.0000	40.0000
50,000.0000 - 79,950.0000	50.0000
80,000.0000 - 99,920.0000	80.0000
100,000.000 -	100.0000

Equities, SEK

(Equities - others, Equity rights, Equity Warrants and Warrants)

0.00 - 4.99	0.01
5.00 - 14.95	0.05
15.00 - 49.90	0.10
50.00 - 149.75	0.25
150.00 - 499.50	0.50
500.00 - 4,999.00	1.00
5,000.00 -	5.00

Certificates

Same as for equities or;

0.00 - 99.99	0.01
100.00 - 499.95	0.05

Convertibles

Same as for equities or;

0.00 - 9.99	0.01
10.00 - 49.95	0.05
50.00 - 499.90	0.10
500.00	0.50

Index funds, SEK

(Units in Funds)

0.00 - 4.99	0.01
5.00 - 499.95	0.05
500.00 - 4,999.00	1.00
5,000.00 -	5.00

Or

Structured with FI or FX, SEK

(Units in Funds)

0.00 -	0.01
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Index funds, NOK

(Unit in Funds Norwegian)

0.00 - 4.99	0,01
5.00 - 99,95	0,05
100.00 - 249,90	0,10
250.00 - 499,75	0,25
500.00 - 4999,50	0,50
5,000.00 -	1,00

Equities, NOK Liquid

**(Equities – secondary traded equities
admitted to trading on Oslo Børs – OBX)**

0.00 – 0.4999	0.0001
0.5 – 0.9995	0.0005
1.00 – 4.999	0.001
5.00 – 9.995	0.005
10.00 – 49.99	0.01
50.00 – 99.95	0.05
100.00 – 499.90	0.10
500.00 – 999.50	0.50
1,000.00 – 4,999.00	1.00
5,000.00 – 9,995.00	5.00
10,000.00 –	10.00

Equities, NOK

**(Equities – secondary traded equities
admitted to trading on Oslo Børs – others)**

0.00 – 9.99	0.01
10.00 – 14.95	0.05
15.00 – 49.90	0.10
50.00 – 99.75	0.25
100.00 – 249.50	0.50
250.00 –	1.00

NASDAQ OMX Iceland

XICE Equities, ISK

**(Equities, Collective Investment
Undertakings and Units in Funds)**

0.00 – 14.99	0.01
15.00 – 49.95	0.05
50.00 – 99.90	0.10
100.00 – 499.50	0.50
500.00 – 4,999.00	1.00
5,000.00 –	5.00

NASDAQ OMX Helsinki

XHEL Equities EUR, FESE2

**(Equities – Large Cap, OMXH25 and
Subscription Rights)**

0.0000 – 0.4999	0.0001
0.5000 – 0.9995	0.0005
1.0000 – 1.9990	0.0010
2.0000 – 4.9980	0.0020
5.0000 – 9.9950	0.0050
10.0000 – 49.9900	0.0100
50.0000 – 99.9500	0.0500

	100.0000 - 499.9000	0.1000
	500.0000 - 999.5000	0.5000
	1,000.0000 - 4,999.0000	1.0000
	5,000.0000 - 9,995.0000	5.0000
	10,000.0000 - 19,990.0000	10.0000
	20,000.0000 - 39,980.0000	20.0000
	40,000.0000 - 49,960.0000	40.0000
	50,000.0000 - 79,950.0000	50.0000
	80,000.0000 - 99,920.0000	80.0000
	100,000.000 -	100.0000
	All other Equity Instruments	
	0.00 -	0.01
NASDAQ OMX Tallinn	XTAL – Equities 3 decimals. (including First North)	
	0.00 -	0.001
NASDAQ OMX Riga	XRIS – Equities 3 decimals Equities (including First North)	
	0.00 -	0.001
NASDAQ OMX Vilnius	XLIT– Equities EUR 3 decimals (including First North)	
	0.00 -	0.001

The tick sizes for instruments listed on First North in respective country are as follows:

Exchange	Category	Tick size
OMX First North Denmark	<i>XCSE Equities DKK</i>	
	0.00 - 4.99	0.01
	5.00 - 9.95	0.05
	10.00 - 49.90	0.10
	50.00 - 499.50	0.50
	500.00 - 4,999.00	1.00
	5,000.00 - 19,990.00	10.00
	20,000.00 -	100.00
First North Stockholm	<i>FN Equities (First North STO)</i>	
	0.00 - 4.99	0.01
	5.00 - 14.95	0.05
	15.00 - 49.75	0.10
	50.00 - 99.75	0.25
	100.00 - 499.50	0.50
	500.00 - 4999.00	1.00
	5000.00 -	5.00
	<i>Equities, SEK (First North Certificates STO, First North Warrants STO)</i>	
	0.00 - 4.99	0.01
	5.00 - 14.95	0.05
	15.00 - 49.90	0.10
	50.00 - 149.75	0.25
	150.00 - 499.50	0.50
	500.00 - 4,999.00	1.00
	5,000.00 -	5.00
	<i>FN Convertibles (First North Convertibles STO)</i>	
	0.00 - 9.99	0.01
	10.00 - 49.95	0.05
	50.00 - 499.90	0.10
	500.000 -	0.50

First North Finland*	XHEL-equities EUR (First North Finland)	
	0.00 -	0.01
First North Iceland	FN Equities	
	0.00 – 4.99	0.01
	5.00 – 14.95	0.05
	15.00 – 49.75	0.10
	50.00 – 99.75	0.25
	100.00 – 499.50	0.50
	500.00 – 4999.00	1.00
	5000.00 -	5.00

Note that if one share series of an issuer qualifies to Large Cap segment or main indices (OMXC20/ OMXH25/OMXS30) and hence to the FESE tick size table 2, also other share series of that issuer is included. Secondly, if a share has been within the Large Cap segment or main indices (OMXC20/ OMXH25/OMXS30) – and hence is internationally traded on other marketplaces – then these shares will continue to have the FESE tick size table 2 applied even after a segment or index change.

* First North Finland will be implemented in April 4, 2011.

Appendix G: Note Codes

Note-Codes mark the order book to indicate that special conditions occur.

Examples of currently used Note Codes:

Code Name

BP	Excluding comb. Bonus issue & Split
BR	Company Bankruptcy
BS	Excluding comb. Bonus & Split
CS	Cent shares
OB	On the surveillance list
PO	Company subject to public offer
RL	Removal from listing in process
RS	Reversed Split
SL	Other surveillance list reason
SP	Excluding participating in split
SR	Excluding comb. split and issue right/s
SS	Excluding comb. Split & Redemption share
SU	Suspension
TO	A significant reverse take-over pending
UL	Unlisted
WI	When Issued
XD	Excluding dividend
XR	Excluding participating in right/s

Appendix H: Combinations of Order Types, attributes, session and time-in-force

The following tables show the combinations of order types, attributes and time-in-force conditions. They should be read in combination with the order descriptions in Chapter 6.

NB. Where Types are shown with Time criteria, the table indicates whether the order types will participate in the Call or Continuous Trading (i.e. not whether the order types are available to be entered in Call or Continuous Trading).

All attributes are available for Limit orders. Only minimum quantity may be used with Market orders. No attribute can be applied to Imbalance orders.

Attributes and Types

	Limit	Market	Imbalance
Reserve	x		
Pegged	x		
Minimum quantity	x	x	
Non-display	x		

All order types are possible in Calls. In Continuous trading only Limit, Market and Nordic@Mid orders are possible. Nordic@Mid orders can be submitted during intra-day calls, but are not effective in the call.

Types and Session

	Call	Continuous trading
Limit	x	x
Market	x	x
Imbalance	x	
Nordic@Mid		x
Market Maker		x

All time-in-force conditions are available for both Calls and Continuous trading. The time-in-force condition will be activated when matching is active, i.e. in the call it is during the uncross and in continuous trading is it for the duration of the session except in the case of a halt.

Time-in-force and Session

	Call	Continuous trading
Immediate or Cancel	x	X
Good-till-market close	x	X
Good-till-cancelled	x	X
Good-till-time	x	X

Only the Reserve and Non-display attributes are available in calls with the exception of Market pegged orders, that at order entry during a call automatically will be converted to a Market IOC order. During Continuous trading, all attributes may be used.

Attribute and Session

	Call	Continuous trading
Reserve	x	X
Pegged		X
Minimum quantity		X
Non-display	x	X

Minimum Acceptable Quantity (MAQ) is the only attribute allowed with the Time-in-force condition IOC. MAQ is however allowed on Non-displayed orders. Here the Non-displayed order would still need to meet LIS criteria, but the trader would be able to state that the order should only match if the MAQ criteria is met or exceeded. MAQ is also an available attribute on the Nordic@Mid order. All other attributes are allowed with all other Time-in-force conditions.

Attribute and Time-in-force

	Immediate or Cancel	Good-till-market close	Good-till-cancelled	Good-till-time
Reserve		x	x	x
Pegged		x		x
Minimum quantity	x			
Non-display		x	x	x

All time-in-force conditions are allowed for Limit orders. Market orders and Imbalance orders must be IOC.

Time-in-force and Type

	Limit	Market	Imbalance	Market Maker
Immediate or Cancel	x	x	x	
Good-till-market close	x			x
Good-till-cancelled	x			
Good-till-time	x			x

In the tables above, 'x' indicates that the combination is allowed, blanks indicate that the combination is not allowed or that the combination is immediately cancelled without noting the validity condition.

The time-in-force criterion only has an effect when the matching process is active. During a call, this means that the time-in-force criterion will be applied during the uncross, not during pre-open. E.g. if an order is entered during the pre-open with good-till-time X and the uncross happens after X, the order will be cancelled before the uncross. If an order is entered during the pre-open with time-in-force immediate-or-cancel, the order will participate in the uncross and any unfilled part of it will be cancelled after the uncross.

Appendix I: Non-trading days and half day trading

Non trading days per country (even them that fall into a week-end are presented):

Exchange	Date	Description	Business Day	Trading Day	Half-day Before
Sweden					
XSTO	2010-11-06	All Saints Day (Saturday after Oct. 30th)	No	No	Yes
XSTO	2010-12-24	Christmas Eve (Dec. 24th)	No	No	No
XSTO	2010-12-25	Christmas Day (Dec. 25th)	No	No	No
XSTO	2010-12-26	Boxing Day (Dec. 26th)	No	No	No
XSTO	2010-12-31	New Years Eve (Dec. 31st)	No	No	No
XSTO	2011-01-01	New Years Day (Jan. 1st)	No	No	No
XSTO	2011-01-06	Epiphany (Jan. 6th)	No	No	Yes
XSTO	2011-04-22	Good Friday (Friday before Easter)	No	No	Yes
XSTO	2011-04-24	Easter (Sunday)	No	No	No
XSTO	2011-04-25	Easter Monday	No	No	No
XSTO	2011-05-01	International Labor Day (May 1st)	No	No	Yes
XSTO	2011-06-02	Ascension (39 days after Easter)	No	No	Yes
XSTO	2011-06-06	National Day (Jun. 6th)	No	No	No
XSTO	2011-06-12	Pentecost (49 days after Easter)	No	No	No
XSTO	2011-06-24	Midsummer Eve (day before Midsummer)	No	No	No
XSTO	2011-06-25	Midsummer Day (Saturday after Jun. 19th)	No	No	No
XSTO	2011-11-05	All Saints Day (Saturday after Oct. 30th)	No	No	Yes
XSTO	2011-12-24	Christmas Eve (Dec. 24th)	No	No	No
XSTO	2011-12-25	Christmas Day (Dec. 25th)	No	No	No
XSTO	2011-12-26	Boxing Day (Dec. 26th)	No	No	No
XSTO	2011-12-31	New Years Eve (Dec. 31st)	No	No	No
XSTO	2012-01-01	New Years Day (Jan. 1st)	No	No	No
XSTO	2012-01-06	Epiphany (Jan. 6th)	No	No	Yes
XSTO	2012-04-06	Good Friday (Friday before Easter)	No	No	Yes
XSTO	2012-04-08	Easter (Sunday)	No	No	No
XSTO	2012-04-09	Easter Monday	No	No	No
XSTO	2012-05-01	International Labor Day (May 1st)	No	No	Yes
XSTO	2012-05-17	Ascension (39 days after Easter)	No	No	Yes
XSTO	2012-05-27	Pentecost (49 days after Easter)	No	No	No
XSTO	2012-06-06	National Day (Jun. 6th)	No	No	No
XSTO	2012-06-22	Midsummer Eve (day before Midsummer)	No	No	No
XSTO	2012-06-23	Midsummer Day (Saturday after Jun. 19th)	No	No	No

XSTO	2012-11-03	All Saints Day (Saturday after Oct. 30th)	No	No	Yes
XSTO	2012-12-24	Christmas Eve (Dec. 24th)	No	No	No
XSTO	2012-12-25	Christmas Day (Dec. 25th)	No	No	No
XSTO	2012-12-26	Boxing Day (Dec. 26th)	No	No	No
XSTO	2012-12-31	New Years Eve (Dec. 31st)	No	No	No
Denmark					
XCSE	2010-12-24	Christmas Eve (Dec. 24th)	No	No	No
XCSE	2010-12-25	Christmas Day (Dec. 25th)	No	No	No
XCSE	2010-12-26	Boxing Day (Dec. 26th)	No	No	No
XCSE	2010-12-31	New Years Eve (Dec. 31st)	No	No	No
XCSE	2011-01-01	New Years Day (Jan. 1st)	No	No	No
XCSE	2011-04-17	Palm Sunday (Sunday before Easter) Maudy Thursday (Thursday before Easter)	No	No	No
XCSE	2011-04-21	Good Friday (Friday before Easter)	No	No	No
XCSE	2011-04-24	Easter (Sunday)	No	No	No
XCSE	2011-04-25	Easter Monday	No	No	No
XCSE	2011-05-20	Prayer Day (26 days after Easter)	No	No	No
XCSE	2011-06-02	Ascension (39 days after Easter)	No	No	No
XCSE	2011-06-03	Bank holiday	No	No	No
XCSE	2011-06-05	Constitution Day (June 5th)	No	No	No
XCSE	2011-06-12	Whit Sunday (49 days after Easter)	No	No	No
XCSE	2011-06-13	Whit Monday (day after Pentecost)	No	No	No
XCSE	2011-12-24	Christmas Eve (Dec. 24th)	No	No	No
XCSE	2011-12-25	Christmas Day (Dec. 25th)	No	No	No
XCSE	2011-12-26	Boxing Day (Dec. 26th)	No	No	No
XCSE	2011-12-31	New Years Eve (Dec. 31st)	No	No	No
XCSE	2012-01-01	New Years Day (Jan. 1st)	No	No	No
XCSE	2012-04-01	Palm Sunday (Sunday before Easter) Maudy Thursday (Thursday before Easter)	No	No	No
XCSE	2012-04-05	Good Friday (Friday before Easter)	No	No	No
XCSE	2012-04-08	Easter (Sunday)	No	No	No
XCSE	2012-04-09	Easter Monday	No	No	No
XCSE	2012-05-04	Prayer Day (26 days after Easter)	No	No	No
XCSE	2012-05-17	Ascension (39 days after Easter)	No	No	No
XCSE	2012-05-18	Bank holiday	No	No	No
XCSE	2012-05-27	Whit Sunday (49 days after Easter)	No	No	No
XCSE	2012-05-28	Whit Monday (day after Pentecost)	No	No	No
XCSE	2012-06-05	Constitution Day (June 5th)	No	No	No
XCSE	2012-12-24	Christmas Eve (Dec. 24th)	No	No	No
XCSE	2012-12-25	Christmas Day (Dec. 25th)	No	No	No

XCSE	2012-12-26	Boxing Day (Dec. 26th)	No	No	No
XCSE	2012-12-31	New Years Eve (Dec. 31st)	No	No	No
Finland					
XHEL	2010-11-06	All Saints Day (Saturday after Oct. 30th)	No	No	No
XHEL	2010-12-06	Independence Day (Dec. 6th)	No	No	No
XHEL	2010-12-24	Christmas Eve (Dec. 24th)	No	No	No
XHEL	2010-12-25	Christmas Day (Dec. 25th)	No	No	No
XHEL	2010-12-26	Boxing Day (Dec. 26th)	No	No	No
XHEL	2010-12-31	New Years Eve (Dec. 31st)	Yes	No	No
XHEL	2011-01-01	New Years Day (Jan. 1st)	No	No	No
XHEL	2011-01-06	Epiphany (Jan. 6th)	No	No	No
XHEL	2011-04-22	Good Friday (Friday before Easter)	No	No	No
XHEL	2011-04-24	Easter (Sunday)	No	No	No
XHEL	2011-04-25	Easter Monday	No	No	No
XHEL	2011-05-01	May Day (May 1st)	No	No	No
XHEL	2011-06-02	Ascension (39 days after Easter)	No	No	No
XHEL	2011-06-12	Pentecost (49 days after Easter)	No	No	No
XHEL	2011-06-24	Midsummer Eve (day before Midsummer)	No	No	No
XHEL	2011-06-25	Midsummer Day (Saturday after Jun. 19th)	No	No	No
XHEL	2011-11-05	All Saints Day (Saturday after Oct. 30th)	No	No	No
XHEL	2011-12-06	Independence Day (Dec. 6th)	No	No	No
XHEL	2011-12-24	Christmas Eve (Dec. 24th)	No	No	No
XHEL	2011-12-25	Christmas Day (Dec. 25th)	No	No	No
XHEL	2011-12-26	Boxing Day (Dec. 26th)	No	No	No
XHEL	2011-12-31	New Years Eve (Dec. 31st)	No	No	No
XHEL	2012-01-01	New Years Day (Jan. 1st)	No	No	No
XHEL	2012-01-06	Epiphany (Jan. 6th)	No	No	No
XHEL	2012-04-06	Good Friday (Friday before Easter)	No	No	No
XHEL	2012-04-08	Easter (Sunday)	No	No	No
XHEL	2012-04-09	Easter Monday	No	No	No
XHEL	2012-05-01	May Day (May 1st)	No	No	No
XHEL	2012-05-17	Ascension (39 days after Easter)	No	No	No
XHEL	2012-05-27	Pentecost (49 days after Easter)	No	No	No
XHEL	2012-06-22	Midsummer Eve (day before Midsummer)	No	No	No
XHEL	2012-06-23	Midsummer Day (Saturday after Jun. 19th)	No	No	No
XHEL	2012-11-03	All Saints Day (Saturday after Oct. 30th)	No	No	No
XHEL	2012-12-06	Independence Day (Dec. 6th)	No	No	No
XHEL	2012-12-24	Christmas Eve (Dec. 24th)	No	No	No
XHEL	2012-12-25	Christmas Day (Dec. 25th)	No	No	No
XHEL	2012-12-26	Boxing Day (Dec. 26th)	No	No	No

XHEL	2012-12-31	New Years Eve (Dec. 31st)	Yes	No	No
Iceland					
XICE	2010-12-24	Christmas Eve (Dec. 24th)	No	No	No
XICE	2010-12-25	Christmas Day (Dec. 25th)	No	No	No
XICE	2010-12-26	Boxing Day (Dec. 26th)	No	No	No
XICE	2010-12-31	New Years Eve (Jan. 31st)	Yes	No	No
XICE	2011-01-01	New Years Day (Dec. 31st)	No	No	No
XICE	2011-04-21	Maudy Thursday (Thursday before Easter), First Day of Summer (Thursday after Apr. 18th)	No	No	No
XICE	2011-04-22	Good Friday (Friday before Easter)	No	No	No
XICE	2011-04-24	Easter (Sunday)	No	No	No
XICE	2011-04-25	Easter Monday	No	No	No
XICE	2011-05-01	International Labor Day (May 1st)	No	No	No
XICE	2011-06-02	Ascension (39 days after Easter)	No	No	No
XICE	2011-06-12	Pentecost (49 days after Easter)	No	No	No
XICE	2011-06-13	Whit Monday (day after Pentecost)	No	No	No
XICE	2011-06-17	National Day (Jun. 17th)	No	No	No
XICE	2011-08-01	Commerce Day (First Monday in Aug.)	No	No	No
XICE	2011-12-24	Christmas Eve (Dec. 24th)	No	No	No
XICE	2011-12-25	Christmas Day (Dec. 25th)	No	No	No
XICE	2011-12-26	Boxing Day (Dec. 26th)	No	No	No
XICE	2011-12-31	New Years Eve (Jan. 31st)	No	No	No
XICE	2012-01-01	New Years Day (Dec. 31st)	No	No	No
XICE	2012-04-05	Maudy Thursday (Thursday before Easter)	No	No	No
XICE	2012-04-06	Good Friday (Friday before Easter)	No	No	No
XICE	2012-04-08	Easter (Sunday)	No	No	No
XICE	2012-04-09	Easter Monday	No	No	No
XICE	2012-04-19	First Day of Summer (Thursday after Apr. 18th)	No	No	No
XICE	2012-05-01	International Labor Day (May 1st)	No	No	No
XICE	2012-05-17	Ascension (39 days after Easter)	No	No	No
XICE	2012-05-27	Pentecost (49 days after Easter)	No	No	No
XICE	2012-05-28	Whit Monday (day after Pentecost)	No	No	No
XICE	2012-06-17	National Day (Jun. 17th)	No	No	No
XICE	2012-08-06	Commerce Day (First Monday in Aug.)	No	No	No
XICE	2012-12-24	Christmas Eve (Dec. 24th)	No	No	No
XICE	2012-12-25	Christmas Day (Dec. 25th)	No	No	No
XICE	2012-12-26	Boxing Day (Dec. 26th)	No	No	No
XICE	2012-12-31	New Years Eve (Jan. 31st)	Yes	No	No
	2010-12-24	Christmas Eve (Dec. 24th)	No	No	No

Estonia

XTAL					
XTAL	2010-12-25	Christmas Day (Dec. 25th)	No	No	No
XTAL	2010-12-26	Boxing Day (Dec. 26th)	No	No	No
XTAL	2011-01-01	New Years Day (Jan. 1st)	No	No	No
XTAL	2011-02-24	Independence Day (Feb. 24th)	No	No	No
XTAL	2011-04-22	Good Friday (Friday before Easter)	No	No	No
XTAL	2011-04-24	Easter (Sunday)	No	No	No
XTAL	2011-04-25	Easter (Monday)	Yes	No	No
XTAL	2011-05-01	Spring Day (May 1st)	No	No	No
XTAL	2011-06-02	Ascension (39 days after Easter)	Yes	No	No
XTAL	2011-06-12	Whit Sunday (49 days after Easter)	No	No	No
XTAL	2011-06-23	Victory Day (Jun. 23rd)	No	No	No
XTAL	2011-06-24	St Johns Day (Jun. 24th)	No	No	No
XTAL	2011-08-20	Day of Restoration of Independence (Aug. 20th)	No	No	No
XTAL	2011-12-24	Christmas Eve (Dec. 24th)	No	No	No
XTAL	2011-12-25	Christmas Day (Dec. 25th)	No	No	No
XTAL	2011-12-26	Boxing Day (Dec. 26th)	No	No	No
XTAL	2012-01-01	New Years Day (Jan. 1st)	No	No	No
XTAL	2012-02-24	Independence Day (Feb. 24th)	No	No	No
XTAL	2012-04-06	Good Friday (Friday before Easter)	No	No	No
XTAL	2012-04-08	Easter (Sunday)	No	No	No
XTAL	2012-04-09	Easter (Monday)	Yes	No	No
XTAL	2012-05-01	Spring Day (May 1st)	No	No	No
XTAL	2012-05-17	Ascension (39 days after Easter)	Yes	No	No
XTAL	2012-05-27	Whit Sunday (49 days after Easter)	No	No	No
XTAL	2012-06-23	Victory Day (Jun. 23rd)	No	No	No
XTAL	2012-06-24	St Johns Day (Jun. 24th)	No	No	No
XTAL	2012-08-20	Day of Restoration of Independence (Aug. 20th)	No	No	No
XTAL	2012-12-24	Christmas Eve (Dec. 24th)	No	No	No
XTAL	2012-12-25	Christmas Day (Dec. 25th)	No	No	No
XTAL	2012-12-26	Boxing Day (Dec. 26th)	No	No	No
XTAL	2012-12-31	New Years Eve (Dec. 31st)	Yes	No	No

Lithuania

XLIT	2010-11-01	All Saints Day (Nov. 1st)	No	No	No
XLIT	2010-12-24	Christmas Eve (Dec. 24th)	No	No	No
XLIT	2010-12-25	Christmas Day (Dec. 25th)	No	No	No
XLIT	2010-12-26	Boxing Day (Dec. 26th)	No	No	No
XLIT	2011-01-01	New Years Day (Jan. 1st)	No	No	No
XLIT	2011-02-16	Independence Day (Feb. 16th)	No	No	No
XLIT	2011-03-11	Restoration of Independence (Mar.	No	No	No

		11th)			
XLIT	2011-04-22	Good Friday (Friday before Easter)	No	No	No
XLIT	2011-04-24	Easter (Sunday)	No	No	No
XLIT	2011-04-25	Easter Monday	No	No	No
XLIT	2011-05-01	International Labor Day (May 1st), Mothers Day	No	No	No
XLIT	2011-06-02	Ascension (39 days after Easter)	Yes	No	No
XLIT	2011-06-24	Midsummer Festival (Jun. 24th)	No	No	No
XLIT	2011-07-06	Coronation of Mindaugas, King of Lithuania (Jul. 6th)	No	No	No
XLIT	2011-08-15	Assumption Day (Aug. 15th)	No	No	No
XLIT	2011-10-31	Non-business day in Lithuania	No	No	No
XLIT	2011-11-01	All Saints Day (Nov. 1st)	No	No	No
XLIT	2011-12-25	Christmas Day (Dec. 25th)	No	No	No
XLIT	2011-12-26	Boxing Day (Dec. 26th)	No	No	No
XLIT	2012-01-01	New Years Day (Jan. 1st)	No	No	No
XLIT	2012-02-16	Independence Day (Feb. 16th)	No	No	No
XLIT	2012-03-11	Restoration of Independence (Mar. 11th)	No	No	No
XLIT	2012-04-06	Good Friday (Friday before Easter)	No	No	No
XLIT	2012-04-08	Easter (Sunday)	No	No	No
XLIT	2012-04-09	Easter Monday	No	No	No
XLIT	2012-05-01	International Labor Day (May 1st)	No	No	No
XLIT	2012-05-06	Mothers Day (First Sunday in May)	No	No	No
XLIT	2012-05-17	Ascension (39 days after Easter)	Yes	No	No
XLIT	2012-06-24	Midsummer Festival (Jun. 24th)	No	No	No
XLIT	2012-07-06	Coronation of Mindaugas, King of Lithuania (Jul. 6th)	No	No	No
XLIT	2012-08-15	Assumption Day (Aug. 15th)	No	No	No
XLIT	2012-11-01	All Saints Day (Nov. 1st)	No	No	No
XLIT	2012-12-24	Christmas Eve (Dec. 24th)	No	No	No
XLIT	2012-12-25	Christmas Day (Dec. 25th)	No	No	No
XLIT	2012-12-26	Boxing Day (Dec. 26th)	No	No	No
XLIT	2012-12-31	New Years Eve (Dec. 31st)	Yes	No	No
Latvia					
		Proclamation of the Republic (Nov. 18th)			
XRIS	2010-11-18	Proclamation of the Republic (Nov. 18th)	No	No	No
XRIS	2010-12-24	Christmas Eve (Dec. 24th)	No	No	No
XRIS	2010-12-25	Christmas Day (Dec. 25th)	No	No	No
XRIS	2010-12-26	Boxing Day (Dec. 26th)	No	No	No
XRIS	2010-12-31	New Years Eve (Dec. 31st)	No	No	No
XRIS	2011-01-01	New Years Day (Jan. 1st)	No	No	No
XRIS	2011-04-22	Good Friday (Friday before Easter)	No	No	No
XRIS	2011-04-24	Easter (Sunday)	No	No	No
XRIS	2011-04-25	Easter Monday	No	No	No

		International Labor Day, Convocation of the Constituent Assembly of the Republic (May 1st)	No	No	No
XRIS	2011-05-01	Declaration of Independence Day (May 4th)	No	No	No
XRIS	2011-05-04	Ascension (39 days after Easter)	Yes	No	No
XRIS	2011-06-02	Midsummer Day (Jun. 23rd)	No	No	No
XRIS	2011-06-23	St Johns Day (Jun. 24th)	No	No	No
XRIS	2011-06-24	Proclamation of the Republic (Nov. 18th)	No	No	No
XRIS	2011-11-18	Christmas Eve (Dec. 24th)	No	No	No
XRIS	2011-12-24	Christmas Day (Dec. 25th)	No	No	No
XRIS	2011-12-25	Boxing Day (Dec. 26th)	No	No	No
XRIS	2011-12-26	New Years Eve (Dec. 31st)	No	No	No
XRIS	2011-12-31	New Years Day (Jan. 1st)	No	No	No
XRIS	2012-01-01	Good Friday (Friday before Easter)	No	No	No
XRIS	2012-04-06	Easter (Sunday)	No	No	No
XRIS	2012-04-08	Easter Monday	No	No	No
XRIS	2012-04-09	International Labor Day, Convocation of the Constituent Assembly of the Republic (May 1st)	No	No	No
XRIS	2012-05-01	Declaration of Independence Day (May 4th)	No	No	No
XRIS	2012-05-04	Ascension (39 days after Easter)	Yes	No	No
XRIS	2012-05-17	Midsummer Day (Jun. 23rd)	No	No	No
XRIS	2012-06-23	St Johns Day (Jun. 24th)	No	No	No
XRIS	2012-06-24	Proclamation of the Republic (Nov. 18th)	No	No	No
XRIS	2012-11-18	Christmas Eve (Dec. 24th)	No	No	No
XRIS	2012-12-24	Christmas Day (Dec. 25th)	No	No	No
XRIS	2012-12-25	Boxing Day (Dec. 26th)	No	No	No
XRIS	2012-12-26	New Years Eve (Dec. 31st)	No	No	No
XRIS	2012-12-31				
Norway	2010-12-24	Christmas Eve (Dec. 24th)	Yes	No	No
XSTO (Oslo)	2010-12-25	Christmas Day (Dec. 25th)	No	No	No
XSTO (Oslo)	2010-12-26	Boxing Day (Dec. 26th)	No	No	No
XSTO (Oslo)	2010-12-31	New Years Eve (Dec. 31st)	Yes	No	No
XSTO (Oslo)	2011-01-01	New Years Day (Jan. 1st)	No	No	No
XSTO (Oslo)	2011-04-17	Palm Sunday (Sunday before Easter)	No	No	No
XSTO (Oslo)	2011-04-21	Maudy Thursday (Thursday before Easter)	No	No	Yes
XSTO (Oslo)	2011-04-22	Good Friday (Friday before Easter)	No	No	No
XSTO (Oslo)	2011-04-24	Easter (Sunday)	No	No	No

XSTO					
(Oslo)	2011-04-25	Easter Monday	No	No	No
XSTO					
(Oslo)	2011-05-01	Labor Day (May 1st)	No	No	No
XSTO					
(Oslo)	2011-05-17	Constitution Day (May 17th)	No	No	No
XSTO					
(Oslo)	2011-06-02	Ascension (39 days after Easter)	No	No	No
XSTO					
(Oslo)	2011-06-12	Pentecost (49 days after Easter)	No	No	No
XSTO					
(Oslo)	2011-06-13	Whit Monday (day after Pentecost)	No	No	No
XSTO					
(Oslo)	2011-12-24	Christmas Eve (Dec. 24th)	No	No	No
XSTO					
(Oslo)	2011-12-25	Christmas Day (Dec. 25th)	No	No	No
XSTO					
(Oslo)	2011-12-26	Boxing Day (Dec. 26th)	No	No	No
XSTO					
(Oslo)	2011-12-31	New Years Eve (Dec. 31st)	No	No	No
XSTO					
(Oslo)	2012-01-01	New Years Day (Jan. 1st)	No	No	No
XSTO					
(Oslo)	2012-04-01	Palm Sunday (Sunday before Easter)	No	No	No
XSTO		Maudy Thursday (Thursday before			
(Oslo)	2012-04-05	Easter)	No	No	Yes
XSTO					
(Oslo)	2012-04-06	Good Friday (Friday before Easter)	No	No	No
XSTO					
(Oslo)	2012-04-08	Easter (Sunday)	No	No	No
XSTO					
(Oslo)	2012-04-09	Easter Monday	No	No	No
XSTO					
(Oslo)	2012-05-01	Labor Day (May 1st)	No	No	No
XSTO		Ascension (39 days after Easter),			
(Oslo)	2012-05-17	Constitution Day	No	No	No
XSTO					
(Oslo)	2012-05-27	Pentecost (49 days after Easter)	No	No	No
XSTO					
(Oslo)	2012-05-28	Whit Monday (day after Pentecost)	No	No	No
XSTO					
(Oslo)	2012-12-24	Christmas Eve (Dec. 24th)	Yes	No	No
XSTO					
(Oslo)	2012-12-25	Christmas Day (Dec. 25th)	No	No	No
XSTO					
(Oslo)	2012-12-26	Boxing Day (Dec. 26th)	No	No	No
XSTO					
(Oslo)	2012-12-31	New Years Eve (Dec. 31st)	Yes	No	No

First North follows the main market non-trading days in respective country.

Half days (Pre-close CET 12.55, Closing auction at CET 13.00).

Appendix J: Official closing prices

The official closing prices and turnover figures are distributed via Genium Consolidated Feed (GCF). Information, in the form of an Order book summary message is sent out at one or two distinct state changes on INET depending on configuration.

Official closing price: Official closing price = Last price. Last price is normally the auction price. In event of no closing auction the last official price update during continuous trading

Turnover: Turnover including manual trades

Trade reporting can be done during Post-trade up until state closed. Those volumes will update Turnover but not last price.

Configuration in GCF:

	Official closing price sent out at state change to	Turnover sent out at state change to
Copenhagen	Closed	Closed
Helsinki	Post trade*	Closed
Iceland	Post trade*	Closed
Riga	Post trade*	Closed
Stockholm	Post trade*	Closed
Tallinn	Post trade*	Closed
Vilnius	Post trade*	Closed

* Trade cancellations done after moving into Post trade will not be taken into consideration. A cancellation of an entire auction is unlikely. It is also very unlikely that a cancel of the last trade during continuous trading happens in combination with no auction.

In all markets except Copenhagen two order book summary messages will be sent out, The first one when moving into Post trade with the information on closing price, and a second when moving into Closed where Turnover is presented.

Appendix K: Trading statistics

Automatically matched trades updates:

- Turnover
- Average price
- Last price
- High/low

Reported trades with Trade Type "Standard Trade" updates:

- Turnover
- Average price (if date of agreement is the current day and if the order book is in continuous trading state and price is within the current public BBO available within the Genium Market Information (GMI) system)
- Last paid price and High/Low price if date of agreement is the current day and if order book is in continuous trading and price is at or within the current BBO available within the GMI system, and the trade is the youngest trade

Reported trades with Trade Type "Derivative Related Transaction", "Portfolio Trade", "Volume Weighted Average Price", "Exchange Granted Trade", "Pre-Opening Trade" and "Non-Standard Settlement" updates:

- Turnover

OTC and SI trades of Trade Type "OTC Trade", "OTC Non-Standard", "SI Standard" and "SI Non-Standard" updates:

- No trade statistics

Nordic@Mid trades:

- Executed trades do not update the Last price, High/low, Average price, VWAP or have any effect on BBO in the central order book.
- Executed trades update Turnover.

Appendix L: MAQ on non-displayed orders

MAQ Definition

The MAQ shall be defined as the actual quantity that needs to be met. There is no connection or restriction with regards to the value of the LIS criteria and what value can be set as the MAQ.

MAQ is also possible to add as an attribute to the Nordic@Mid order.

Trading Sessions and Validity

MAQ orders can participate in the auctions with the MAQ requirement temporarily waived. That is, MAQ orders can participate in both auctions and the continuous market; however, the "MAQ requirement" will be enforced only during the continuous market.

Pre-Open

Non-display orders with a MAQ can be entered during the pre-opening phase, prior to the opening auction, but MAQ will not be honoured. Only limit Non-display orders can be entered during the pre-open phase.

Continuous Trading

During continuous trading, Non-display orders with a MAQ can be entered as:

- Limit orders, or
- Pegged orders

Intraday Auction

Should there be an intraday auction; Non-display orders with a MAQ will participate in the auction but MAQ will not be honoured.

Closing Auction

Non-display orders with a MAQ will participate in the closing auction but MAQ will not be honoured.

Time Validity

Non-display orders with MAQs can be entered with the following time validity:

- GTT (Good Till Time)
- Day
- GTC (Good Till Cancel)

Trades / Partial match

Aggregation rule

The concept of MAQ means "Minimum Execution Size". That is, there should be no partial execution smaller than the MAQ on the order. For example, say that we have on our book two buy orders for 100 shares apiece, and we then receive a sell order for 1000 shares with a MAQ of 150. Even though we could fill the MAQ of 150 by aggregating the shares of the two posted buy orders, we should not execute because it would result in partial executions of less than the MAQ.

An other clarifying example, say that there are two buy orders for 100 shares posted on the book, and someone comes in with an order to sell for 1000 with a MAQ of 100. The sell order will execute against both buy orders, generating two trades for 100 shares apiece.

The key here is that we don't support aggregation.

Exception from aggregation rule on IOC orders

There is an exemption for the aggregation rule for MAQs on IOCs. Currently, we do allow MAQ on IOC orders. And, in this case we do allow teaming, that is, we will allow partials for less than the MAQ, as long as the net shares executed surpasses the MAQ. Doing so we allow support for FOK as simply being an IOC + AON (MAQ=totalQuantity). With the new upgrade on MAQ functionality, we have an exemption for IOCs from the ban against aggregating shares in order to preserve legacy behaviour and continued support of FOK.

Orders not cancelling after leaves fall below MAQ

In a situation when the leaves quantity drops below the MAQ, the system will automatically adjust the MAQ so that the remaining shares are executed AON (all-or-none).

For example, say that we have on our book one buy orders of 900 shares, and we then receive a sell order for 1000 shares with a MAQ of 300. This results in leaves quantity of 100, with a MAQ equal to that volume (AON).

Appendix M: Volatility Guards

Volatility Guards definition

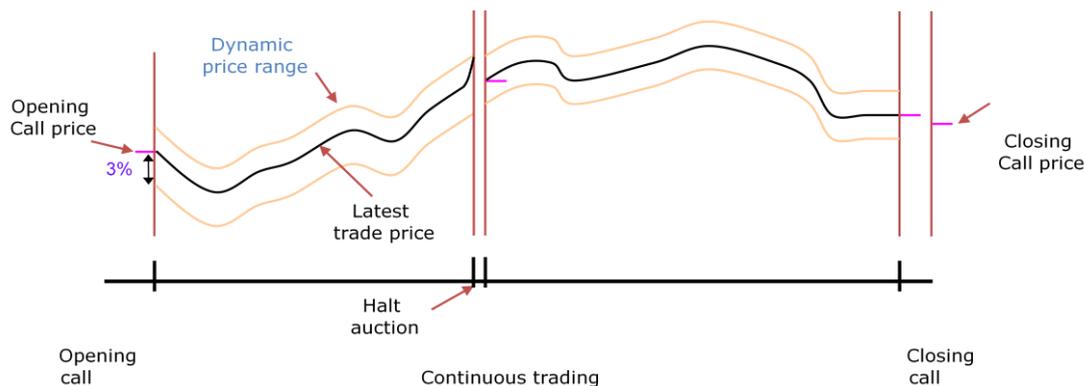
A Volatility Guard is a trading pause and resumption process designed to restore an orderly market in a single order book. The Volatility Guards will be utilized if a proposed trade deviates too much in percentage from the last sale price (Dynamic Volatility Guard) or from the reference price, which is normally the day's opening price (Static Volatility Guard).

When the Volatility Guard is triggered, continuous trading is halted followed by an auction period, after which the order book moves back to continuous trading.

Dynamic Volatility Guard

The Dynamic Volatility Guard is based on the last sale price from Automatch. It is only applicable during continuous trading. A breach will lead to a trading interruption and call auction, where a new Reference price (Auction price) for the Static Volatility Guard will be formed.

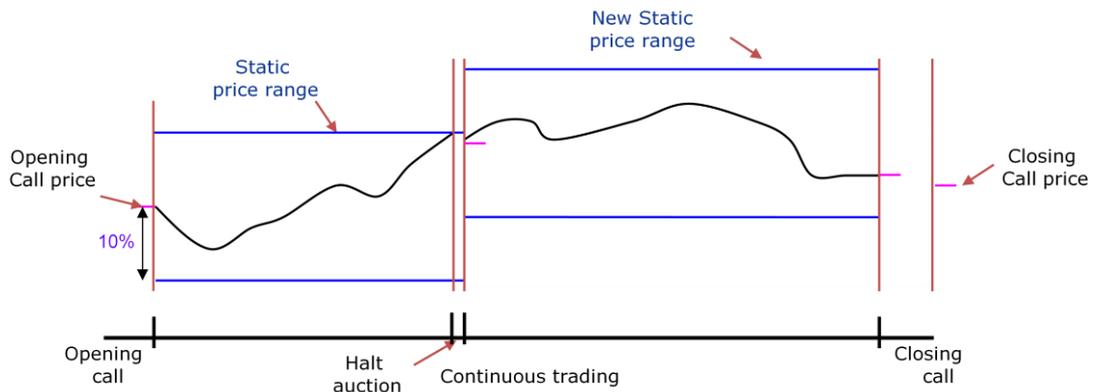
Figure: Dynamic Volatility Guard



Static Volatility Guard

The Static Volatility Guard is based on a reference price which normally is the price from last auction. If there has been no opening auction, previous day's closing price will be used. It is only applicable during continuous trading. A breach of a Static Volatility Guard will lead to a trading interruption and a call auction where a new reference price will be formed.

Figure: Static Volatility Guard



Volatility Guards Halt Auctions

When the Volatility Guard is triggered, continuous trading is halted on the specific order book followed by an auction period with no auto matching. The length of the auction is 60 seconds for a triggered dynamic Volatility Guard, and 180 seconds for an auction triggered by a Static Volatility Guard. The auction period always ends with an uncross. Right after the uncross the order book move into continuous trading again. There will be no auction triggered if there is less than 240 seconds before the scheduled closing auction.

The auction has all the characteristics and rules for order management as a normal halt auctions. There will be no prolonging of the auction, even if the auction price falls outside any previous threshold, or if there is a situation without any crossed prices.

If there has been a Static Volatility Guard triggered, without crossed prices in the auction, the system will calculate a new reference price and applicable bands for the Static Volatility Guard based on the last known AUTOMATCH trade in the matching engine.

Market and Reference data

NASDAQ will disseminate halt reason information on proprietary and consolidated data feeds. Order book reference data will also be available via the consolidated data feed and Nordic Workstation.

Configuration

The following configuration will apply. The configuration is set on order book level and the following thresholds are normally applied. NASDAQ OMX Nordic holds the right to apply deviating thresholds on individual order books. Individual order book configuration is displayed in the reference data. Intraday updates widening the thresholds may occur when normal trading in an illiquid stock is hindered by the general percentages set at start of day, but also in rare situations when there is a natural and for the market well known movement in the stock leading to a situation where NASDAQ OMX Nordic exchanges decides to widening the static thresholds in

order to avoid unnecessary trading halts. Intraday updates of the thresholds will not be made available via the public data feeds.

Trading is allowed up and including the edge value.

Figure: Configuration guideline

Liquidity band	Dynamic	Static
Index shares (OMXS30/OMXH25/OMXC20) ⁷	3%	10%
Other shares or ETFs	5%	15%
First North or Liquidity Group C or spread >= 3%	10%	15%
Penny shares:		
0.25-5 (SEK,DKK), 0.025- 0.5 (EUR)	25%	50%
0.1-0.25 (SEK,DKK), 0.01- 0.025 (EUR)	40%	75%
0.05-0.1 (SEK,DKK), 0.005- 0.01 (EUR)	50%	100%
0-0.05 (SEK,DKK), 0.0- 0.005 (EUR)	100%	200%
Baltic and Icelandic markets:		
Baltic shares	10%	15%
Icelandic shares	10% 5% for selected	N/A

Special cases

If a Fill-or-Kill (IOC + Min Quantity = Total volume) order would lead to a trade outside the range, the entire order will be cancelled without executing any trades. This will never lead to any trading interruptions. Fill-and-Kill orders can trade in part within the range, but as soon as a proposed trade is outside the range the volatility guard will activate. The remainder volume of the order will be entered into the auction as regular "IOC" and participate with the remaining volume.

⁷ In order to safeguard that Volatility guards are not being unnecessary triggered in the Index shares segment (OMXS30/OMXH25/OMXC20), NASDAQ OMX Nordic will on best effort basis apply a special routine on select shares to increase the thresholds to 5% for dynamic, and 15% for static in certain situations. This routine will be used when the issuer has a planned company announcement of a quarterly or yearly result that will be published during the continuous trading session. The wider thresholds will be used for the whole trading day on such days. The next trading day the normal thresholds will be used. Select ETFs tied to index shares are also in this group.

Routed orders will participate in an auction caused by a Volatility Guard. At the end of the auction, the routing would continue as normal on any remaining shares.

Appendix N: Nordic@Mid

Nordic@Mid definition

Nordic@Mid offers separate continuous crossing of mid-point pegged non-displayed orders as a complement to the central order book.

Nordic@Mid enables automatic execution for orders that are large but do not meet the MiFID Large in Scale criteria.

Nordic@Mid orders are non-displayed, and they are executed solely against other Nordic@Mid orders at the midpoint of the reference prices. Published visible Best Bid and Offer (BBO) from NASDAQ OMX Nordic central order book is used as reference price in shares admitted to trading in Copenhagen, Helsinki, Iceland and Stockholm. For Norwegian shares⁸ traded in Stockholm, Oslo Börs BBO is used as reference price.

Nordic@Mid covers NASDAQ OMX Nordic cash equity markets in Stockholm, Helsinki, Copenhagen and Iceland as well as Norwegian shares admitted to trading in NASDAQ OMX Stockholm as follows:

Market/segment	Order books in scope
Copenhagen shares	OMXC20 order books
Helsinki shares	all order books
Stockholm shares	all order books
Iceland shares	all order books
Norwegian shares	all order books

Trading Sessions and Validity

Matching takes place during continuous trading.

Order entry and modification is possible during continuous trading. Order entry or modification is not possible during opening call but possible during intra-day calls (no matching however occurs). Order cancellation is possible until end of pre-close phase. Order price is automatically re-priced by the system when the reference price changes.

Supported optional order attributes: MAQ and Limit price.

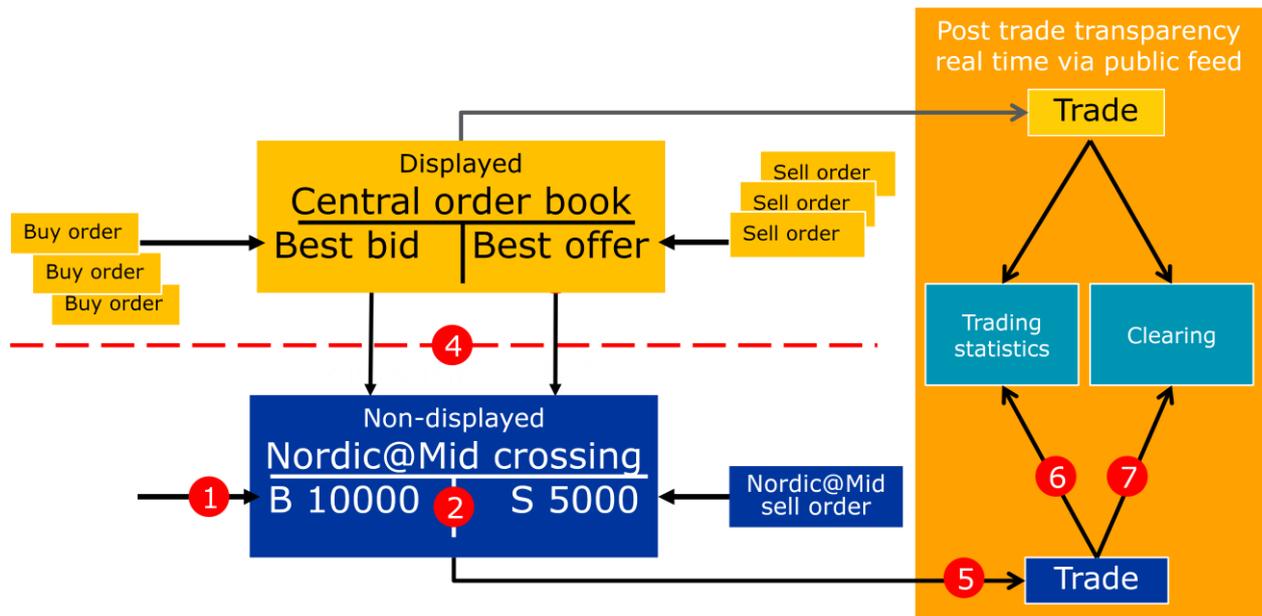
TIF attributes supported are IOC, GTT, Good-till-market close. Any open orders will be cancelled by the system after market close.

Orders are non-displayed and no prices or volumes or any information of the orders will be displayed in public feed.

Workflow

See picture below.

⁸ Will be introduced at time separately announced by NASDAQ OMX Nordic.



1. Order entry, validation and modification

Order entry to Nordic@Mid crossing requires that

- order book is Nordic@Mid eligible,
- participant sends the order to Nordic@Mid execution,
- order size \geq the minimum order size,
- order is inserted as a Nordic@Mid order with peg type midpoint, without any offset.

If these requirements are not met, the order is rejected. Size of an order is validated using previous closing price of the order book. Order modification by a user results in the same validation whereas partial execution of the order resulting in an unfilled part being below the minimum does not.

Nordic@Mid orders have their price automatically adjusted by the trading system in response to changes in BBO prices. Functionality of Nordic@Mid order price update follows the functionality of pegged order price update. This may lead to a situation where the original time priority cannot be guaranteed.

2. Matching

All orders are matched at the midpoint of BBO. Matching rules: internal-time. Matching takes place during continuous trading. Unfilled orders can remain in system.

Matching can result in execution prices being at half tick size levels as the actual midpoint is always used. There will be no rounding of order price to a less aggressive price.

3. Abnormal market conditions

Order price is automatically re-priced by the system when the reference price changes. If reference price is not available, Nordic@Mid orders are suspended from matching.

Orders are suspended by the system if:

- central order book goes into intra-day auction, or
- the reference price doesn't exist due to abnormal market conditions (e.g. one-sided markets), or

- midpoint of reference price is with more than 4 decimals.
- Suspended orders remain in the order book and are unsuspended by the system at the moment the reason of suspension is over.

4. Total separation of Nordic@Mid and central order book matching

Nordic@Mid orders cannot interact with central order book orders: orders are executed solely against other Nordic@Mid orders.

5. Post-trade transparency

Executed trades are published real time via the public NASDAQ OMX feed without counterparty information, except for Copenhagen OMXC20 shares which will have the counterparties revealed in real time. Trade counterparties are disclosed after market close, except in segments having post trade anonymity. Nordic@Mid executions are flagged so that they can be identified.

6. Trading statistics

Executed trades do not update the Last price, High/low, Average price, VWAP or have any effect on BBO in the central order book.

Trade execution does not trigger a Volatility Guard halt.

Executed trades update Turnover.

7. Clearing

Clearing follows the clearing model of the order book/participant: CCP/bilateral and self clearing.

Comparison matrix to Non-displayed orders in central order book

	Nordic@Mid non-displayed orders	Non-displayed orders in central order book
Instrument scope	Helsinki, Stockholm and Iceland: all shares Copenhagen: OMXC20 shares	All shares.
Minimum order size	Helsinki, Stockholm and Iceland Large Cap shares: 50.000 EUR/ 500.000 SEK/ 8.000.000 ISK Helsinki, Stockholm and Iceland other shares: 25.000 EUR/ 250.000 SEK/ 4.000.000 ISK Copenhagen OMXC20 shares: 2.000.000 DKK	According to MiFID Large in Scale criteria: 50.000 – 500.000 EUR depending on ADT
Reference price pegging	Mid-point peg.	Primary peg, Mid-point peg and Market peg.
Offset available	No.	Yes.
Limit Price	Yes.	Yes.
MAQ	Yes.	Yes.
Time-in-Force attributes	Immediate-or-Cancel and day orders. Open orders will be cancelled by the system after market close.	Immediate-or-Cancel, day orders and Good-till-cancelled orders.
Matching price	Actual mid-point is always used. No rounding of order price to a less aggressive price.	According to tick size table, i.e mid-point peg may round to a less aggressive price.
Matching priority	Participant-time.	Price-participant-displayed-time.

8. Minimum order size

Minimum order size is an equivalent number in shares of following thresholds.

Helsinki, Stockholm and Iceland Large Cap shares:
50.000 EUR/ 500.000 SEK/ 8.000.000 ISK.

Helsinki, Stockholm and Iceland other shares:
25.000 EUR/ 250.000 SEK/ 4.000.000 ISK.

Copenhagen OMXC20 shares: 2.000.000 DKK.

9. Nordic@Mid matching examples

1. Matching of Nordic@Mid orders without Limit Price and Minimum Acceptable Quantity

Central order book, BBO = 12,20 - 12,23; midpoint of BBO = 12,215

Bid				Ask			
Order#	Time	Volume	Limit	Limit	Volume	Time	Order#
1	1	10000			15000	1	3
2	2	20000					

Nordic @Mid buy order #1 is entered with a volume of 10000 and without Limit or MAQ.
Nordic@mid buy order #2 is entered with a volume of 20000 and without Limit or MAQ.
Nordic@Mid sell order #3 is entered with a volume of 15000 without Limit or MAQ.

Execution price is the midpoint of BBO. Sell order #3 is executed in following order:

- 1) 10000 @ 12,215 (with buy order #1)
- 2) 5000 @ 12,215 (with buy order #2)

Unfilled part (15000) of the buy order #2 stays in order book.

2. Matching of Nordic@Mid orders with Minimum Acceptable Quantity protection

Central order book, BBO = 12,20 - 12,23; midpoint of BBO = 12,215

Bid				Ask			
Order#	Time	Volume	Limit	Limit	Volume	Time	Order#
3	1	10000			30000 (MAQ 15000)	1	1
				12,21	10000	2	2

Nordic @Mid sell order #1 is entered with a volume of 30000 and MAQ of 15000 and without Limit.

Nordic@mid sell order #2 is entered with a volume of 10000 and Limit of 12,21 and without MAQ.

Nordic@Mid buy order #3 is entered with a volume of 10000 and without Limit or MAQ.

Sell order #1 has time priority over sell order #2 but it is protected by MAQ of 15000, so it cannot be filled by the incoming buy order #3. Sell order #2 has a Limit of 12,21. Since the midpoint of BBO = 12,215 is higher than 12,21, the sell order #2 can be filled by the incoming buy order #3. Thus, execution takes place against sell order #2.

Execution price is the midpoint of BBO:
10000 @ 12,215

Sell order #1 stays in order book.

3. No matching of Nordic@Mid orders – Limit Price protection

Central order book, BBO = 12,20 – 12,23; midpoint of BBO = 12,215

Bid				Ask			
Order#	Time	Volume	Limit	Limit	Volume	Time	Order#
1	1	10000	12,24	12,23	10000	1	3
2	2	20000	12,21				

Nordic @Mid buy order #1 is entered with a volume of 10000 and with Limit of 12,24 and without MAQ.

Nordic@mid buy order #2 is entered with a volume of 20000 and with Limit of 12,21 and without MAQ

Nordic@Mid sell order #3 is entered with a volume of 10000 and with Limit of 12,23 and without MAQ.

No matching takes place. Incoming sell order #3 has a Limit of 12,23 which is higher than the midpoint of BBO = 12,215. Orders #1-#3 will stay in the order book. Sell order #3 will be executed as soon as the midpoint of BBO is equal or higher than the Limit Price of sell order #3.

Appendix O: Order routing

Order routing definition

NASDAQ OMX Nordic offers Smart Order Routing via an order router placed in the Stockholm data center. Order routing is offered during the continuous trading session and guarantees that if the best price is not available in the Nordics, the order will be routed out to the supported away markets for matching attempt there, at that best price, before being posted on the relevant NASDAQ OMX Nordic order book.

Trading Sessions, Order types and Validity

Submitting Routable Orders is only possible during the continuous trading session for the respective NASDAQ OMX Nordic exchange. Order routing is only available via FIX and is an attribute to the "New order single" message.

Order management in terms of new/cancel/replace is supported. Routed orders cannot be cancelled once they have left NASDAQ OMX Nordic. The reason being that they will be outbound routed as a Limit IOC. Remaining volume can however, be cancelled.

Routable orders will never be posted in any other order book than the NASDAQ OMX Nordic main order book.

Order types allowed at order entry are Limit price orders, Market orders, Reserve orders with their whole volume and Non-display orders (fulfilling LIS).

All time in force conditions are allowed at order entry. FOK orders cannot be routable. Any remaining volume on a GTC order will be re-inserted the next trading day without any routing attribute applied (as normal BOOK order). IOC Market pegged order will also be accepted. All orders will automatically be treated as limit immediate or cancel (Limit IOC) when routed. Remaining volume after routing will always be posted in the NASDAQ OMX Nordic order book with the original order conditions.

Away markets

Routing decisions are based on real time feed (EBBO) from supported away markets:

- BATS Europe
- Turquoise
- Chi-x
- Burgundy
- Oslo Börs

NASDAQ OMX will on behalf of the member forward the order to an Introducing Broker that will be used to introduce the order at the MTFs and RM. This means that the order/trade will not be done in the name of the member at the away market. The trade at the away market is therefore done in the name of the Introducing Broker. The away market trade towards the Nordic member will be seen as a mirrored on-exchange trade between the Introducing Broker and the Nordic member. Practically NASDAQ OMX Nordic will send the trade to the CCP that will be the counterpart for both the Introducing Broker and the Nordic member. If away market trade by some reason is cancelled, the mirrored trade towards the member will be cancelled as well (see NMR 5.7.3).

Routable securities

Routable securities are CCP cleared shares traded on away markets:

- OBX 25, OMXC 20, OMXS 30, OMXH 25.
- Large cap or other stocks that are CCP cleared

Routing strategies

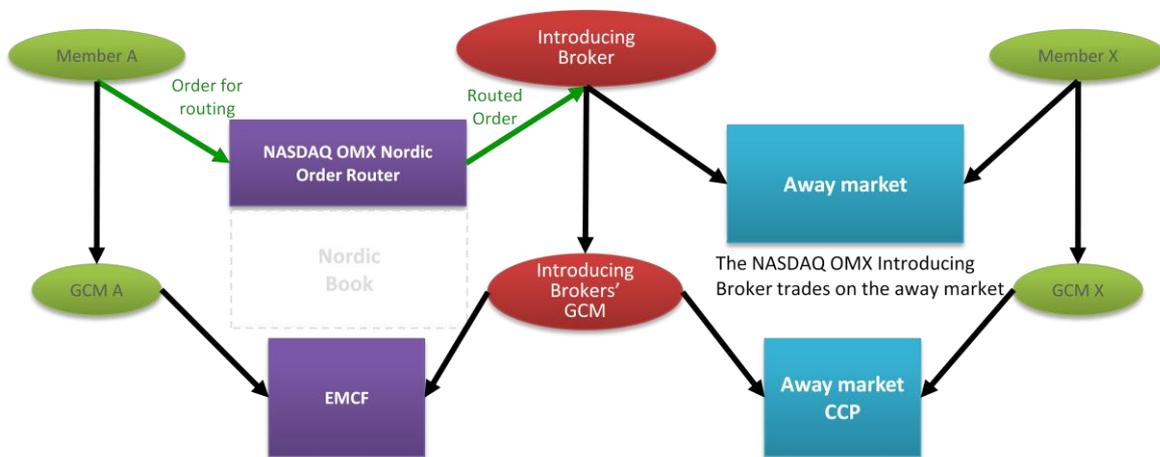
Book: Hit Nordic Book only. Not for routing. This is the default value on all orders.

SCAN: Unfilled part of the order is sent to away markets for a matching attempt. Routing decision will be based on price and volume by the order router. In-between every routing attempt to the next venue, Nordic Book will be checked.

STGY: This Routable order follows the logic of a "SCAN" but the order can be reactivated dynamically and route out again after posting in the relevant NASDAQ OMX Nordic Order Book. This happens if there is a change in the EBO that indicates that all, or a part can be matched elsewhere.

More strategies will be provided going forward.

Workflow for SCAN



The Introducing Broker's away market position is transferred over to Member when one on-exchange transaction A against NOMX Introducing Broker is created and sent to EMCF for clearing.

The Introducing Broker clears and settles its away market trade at the away market's CCP

1. Any order eligible for order routing is sent through the Routing Engine and will automatically check the Nordic Book for best execution before being routed out to an external away market. E.g. if the spread is 100-102 in the NASDAQ OMX Nordic order book, but 100-101 at an away market. A limit order with submitted price of 102, will be re-priced accordingly to 101 before trying to match (price improvement).

2. If the Nordic Book has the best price or a price that is equal to the best price then the order will execute on the Nordic Book. If the Nordic Book does not have the best price, or a portion of that order is still outstanding, then the system uses the EBBO (European Best Bid and Offer defined by NASDAQ OMX Nordic) to determine which external trading venue has the best price before sending the order on to that external venue to be executed.
3. Unfilled volume will be routed to the respective MTF/RM according to the chosen routing strategy. The order will be introduced in the name of the Introducing Broker at the away market. Trades made at other venues than NASDAQ OMX Nordic exchanges will be executed in the name of the Introducing Broker.
4. Remaining volume will after routing always be posted in the Nordic book in the original members name. Posting orders on away markets is not supported.
5. Routing attribution on a security not eligible for order routing will result in a match attempt in the Nordic main order book according to the order conditions. The order will not be transferred onwards to the Introducing broker.

Other conditions

It will only be possible to send in routable orders to the Nordic exchange(s) were the member is a member. E.g. for a member of NASDAQ OMX Copenhagen, only OMXC20 shares are routable.

If the order book is in a halted state, the routable order will IOC the book with the given limit price. Since the book is in a halted state, the order will "stick" and participate in the auction. At the end of the auction, the routing will continue as normal on any remaining shares.

NASDAQ OMX Nordic will utilize low latency market data for the routing decisions towards the London based venues. Due to the physical distance between London and Stockholm any market data will suffer from a slight latency which in certain situations can affect the outcome of the routing. Order routing is therefore done on best effort basis due to these circumstances.

Orders over 5 000 000 EUR will not be routed to away markets.

Mirrored on-exchange trade

When a Member has submitted a routable order, which leads to an away market transaction, a mirroring trade will instantly and automatically be created between the Member and the Introducing Broker at the same price on the applicable NASDAQ OMX Nordic exchange. The Member and the Introducing Broker will thereby be bound such on-exchange trade between each other according to the rules of NMR. That mirroring

trade will instantly and automatically be sent to the CCP for clearing in real time, just as any other on-exchange CCP-cleared trade. The mirrored trade shall, from the Member's point of view, be seen as any other on-exchange trade (e.g. for transaction reporting obligations).

The execution report that is sent to the Member will display the Away Market on which the first trade was made (by exploring the Liquidity code).

Agreement

In order to take use of the Order routing service the member needs to sign an application/agreement with NASDAQ OMX Nordic. Terms and conditions for the service are available on member web.

Appendix P: Market Maker Order (MMO)

MMO definition

A MMO can be matched, and create a trade, if certain conditions are fulfilled.

MMOs will be offered to Market Makers on warrants and certificates and is only possible to enter via the OUCH-protocol. MMO orders will be clearly flagged in the public market data feeds.

Principle workflow

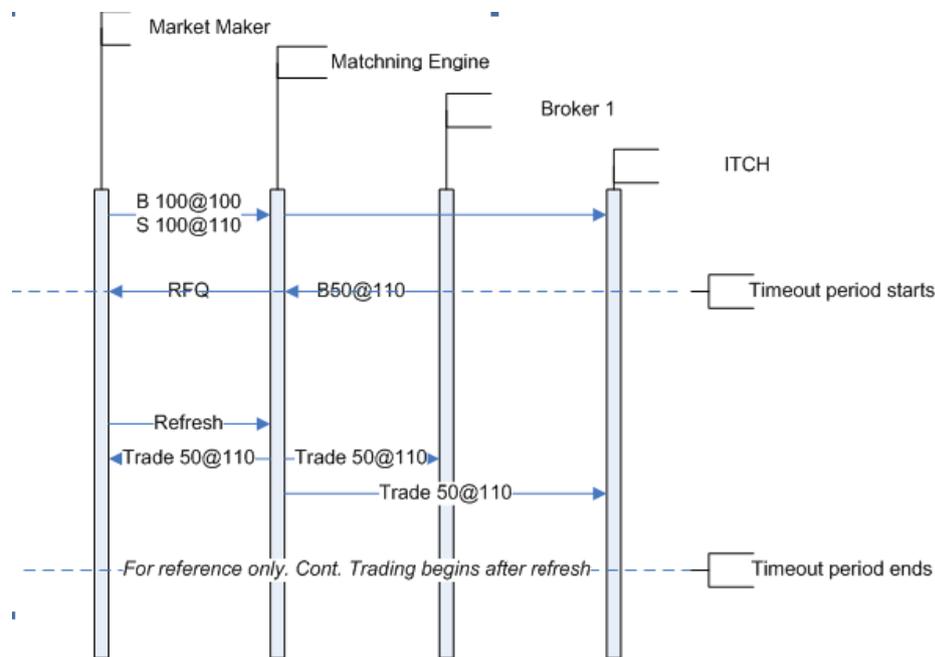


Figure 1:

The Market Maker (MM) sends two quotes B100@100 and S100@110 which are published on ITCH.

Broker 1 sends in a B 50@110, which matches the offer. The order is not published on ITCH. The exchange sends a RFQ to the MM and start the timer for the suspended state. The MM refresh the quote within the time frame and a trade is done with message sent to both parties. The trade is also published on ITCH.

The incoming aggressive order is not visible on ITCH as it is never placed into the order book.

1. One or multiple MMO are entered by the Market Maker. MMO orders are distinguished in the public market data feed with an identification to show that the order is MMO type of orders.
2. If there is an attempt to match with a MMO, a "MMO Refresh Request Message" is sent to the Market Maker, in combination with putting the order book into a "suspended" state, with no matching occurring.
3. Trading resumes once the Market Maker submits a new order, with an updated price, or failing that, after a specified timeout period.

MMO details

MMO is enabled on a per order book basis and the Market Maker has the option to use the MMO or not. The MMO should be displayed and needs to carry a limit price. Non-displayed MMOs will not be accepted.

Only one Market Maker can exist per instrument.

A new order (with new price) or a timeout will trigger matching to commence and activation of possible new orders entered during the time frame were matching is halted. The Market Maker is responsible for canceling his "stale" orders prior to this. MMO protection applies only to the Market Maker's BBO. During a reactivation, multiple MMOs may be executed.

There is no protection on aggressive MMOs crossing resting orders in the order book, and protection is only activated during the continuous market. There is no protection during an auction.

MMO timeout period

The timeout period is set to 600 milliseconds (0,6 seconds).