Nasdaq Iceland
Genium INET

Nasdaq Iceland_Market_Model_For_Fixed-Income_Markets 2024:01

Valid from 2024-11-01

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Definitions

The official definitions are in the Nasdaq 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 is 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).
Circuit breaker (CB)	A mechanism to automatically halt or constrain trading in case there is a sudden significant price movement.
Large in scale (LIS)	A threshold provided by ESMA for every instrument which is used for pre and post trade validations when applicable.
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 pressure	A market pressure means excess supply or demand.
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.
NMR	Nasdaq Nordic Member Rules.
On Exchange Trade	A trade that is automatically matched in the Order Book in accordance with the Nasdaq Nordic Member Rules or executed outside the Order Book but in accordance with the Nasdaq Nordic Member Rules and reported to the exchange as a manual trade.
Pre-Open Pre-Close	Order Book state in the first phase of Opening Call, preceding the Uncross, when Order Management is allowed. Order Book state in the first phase of Closing Call, preceding the Uncross, when Order Management is allowed.
Price limits	Any order or firm quote will be validated against pre-set limits and will be rejected if above or below these limits.
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.

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).
Request for Quote	A trading system as defined in Commission Delegated Regulation (EU) 2017/583 (RTS2) where a Quote is provided in response to a Request for a Quote.
Round Lot	The minimum nominal value 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	The time at which an automatically matched trade is matched or a manual trade has been entered.
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	Trading Hours are found in Chapter 3 of this document.
	Trading Hours start from the Uncross of the opening call and include the Uncross of the closing call.
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 allocation together with order and trade information dissemination take place. Uncross lasts a short time, usually a fraction of a second.
Undisclosed order	A completely hidden buy or sell order that interacts with other visible orders in the order book. The Undisclosed order is always equal to or above pre-trade LIS threshold. Undisclosed orders may only take on order types: Limit order and Market-to-limit order.

1 Introduction

This document describes the functionalities for trading of fixed-income and related instruments on the regulated market and MTF of Nasdaq Iceland hf.

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.

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 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 Nordic's official website.

2 Overview of Market

2.1 Market Structure

The following structure is applied within Nasdaq Iceland Exchange.

Markets
Nasdaq Iceland fixed income is divided into the following two markets:

- Iceland Cash Bond Trading
- Iceland FN Bond Market

All instruments traded on the two markets are quoted at clean price.
In addition, statistics will be provided for so-called turnover lists, which distinguish between various kinds of bonds.

2.2 Trading Rights

Trading rights are given to the following user categories[1]:

1. Trading right is given to the members' exchange traders.
   All trading personnel must be authorized to trade.
2. Direct Market Access (DMA) 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 trading 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.

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 automatically to the trading system, there are always authorized personnel at the exchange member responsible for all orders.

2.3 Market making

Market makers and Liquidity Providers that pursue a market making strategy with the Exchange that takes place during at least half of the trading days over a one month period where they post firm, simultaneous two-way quotes of comparable size and competitive prices and deal on their own account in at least one financial instrument on the Exchange for at least 50% of the daily trading hours of continuous trading excluding opening and closing auctions, will need to have a market maker agreement

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[1] For more information, see NMR.

with the Exchange[2]. The market maker is responsible for contacting the Exchange when it fulfills the market maker requirements in order to set-up the written agreement for every instrument concerned.

2.4 Stressed market conditions and Exceptional Circumstances

Exceptional Circumstances
Exceptional Circumstances is a condition declared by the Exchange which can be applied for a specific Market Maker, all Market Makers on one or several market segments.

During Exceptional Circumstances, a Market Maker's quoting obligations are temporarily disabled.

Exceptional Circumstances will be treated on a case-by-case basis and in the event it is declared, it applies immediately following the publication. Exceptional Circumstances can be set to last from 30 minutes up to end of trading, after which the market will return to normal unless the Exceptional Circumstances period is extended.

In accordance with Article 3 and 4 of the Commission Delegated Regulation (EU) 2017/578 of 13 June 2016 ("RTS 8") supplementing Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 ("MiFID II"), Exceptional Circumstances can be applied according to the below:

- a situation of multiple triggering of volatility auctions for the majority of underlying instruments in a market segment
- war, industrial action and similar
- disorderly trading conditions

Stressed market conditions (SMC)
SMC is a condition declared by the Exchange which can be applied for one or several shares and share indices.

SMC is never used on fixed income instruments.

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[2] MiFID II, RTS 8: http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32017R0578&from=EN

3 Trading sessions and holiday schedules

3.1 Regular trading sessions (CET)

Times in CET	Pre-trade	Opening		Continuous Trading	Closing		After Market		
		Opening call	Uncross		Closing call	Uncross	Terminating	Post Trade	Closed
Summertime	10:00	11:15	11:30	11:30-17:25	17:25	17:30	17:30	17:35	18:00-10:00
Wintertime*	09:00	10:15	10:30	10:30-16:25	16:25	16:30	16:30	16:35	17:00-09:00

* CET standard time

3.2 Normal trading hours (local time)

The trading hours for Nasdaq Iceland Fixed Income are from 09:30 to 15:30.

3.3 Concept of calls

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

1. Auction period Order management
   During the auction period Order management Orders will enter the auction Order book. Orders can be sent as Limit Orders, Market Orders or Market to limit Orders with Time In Force (TIF) conditions (Day, GTC, GTS, IOC, GTD).

2. Price determination and allocation takes place in uncross.

Individual orders are not visible during auction periods. Only the best bid/ask price and volume level is visible.

3.4 Schedules for Manual trades

Manual trades (Trade reporting) is allowed from Pre-trade session up until Closed on both markets. Please refer to chapter 5 for more information.

3.5 Schedule for Holidays

Information concerning all non-trading days for the current and next year is available at the Nasdaq Nordic website.

4 Sessions during the trading day

4.1 Pre-trade session

During the pre-trade session, order and trade management is allowed.

4.2 Calls

The Call procedure (auction) starts in all Order Books of a given Market segment virtually at the same time. A Call consists of two phases: Auction period Order management and uncross.

During Calls individual orders are not displayed in the public data feed. Only the best bid/ask price and volume level is visible.

The uncross phase includes price determination, volume allocation, and delivery of Equilibrium price information.

4.2.1 Opening call

Order entry and full Order management is available through the 09:30 opening auction uncross (and after). The uncross takes place between 09:30:00 to 09:30:05. Orders with time-in-force conditions Day, Good-Till-Cancelled (GTC), Immediate-Or-Cancel (IOC), Good-Till-date (GTD) and Good till Sessions (GTS) are available 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.

Orders entered during pre-open are assigned time priority. No matching until 09:30. Unexecuted orders (non-IOC) remaining after the uncross will transition into the continuous market with retained time priority.

	Pre-trading (local time)	Opening Call (local time)
	08:00 – 09:15	09:15 – ~09:30
Order Management	Full order management Order entry: DAY, GTC, IOC, GTD and GTS. Reducing volume maintains priority, other amendments will result in a loss of priority	
Auto matching	No	
Market by order transparency	No Market By Order transparency.	
Equilibrium data	No	Equilibrium price (EP) with indicative traded volume based on all Orders Best Bid and Offer volumes and prices, excluding non-display Orders, are disseminated for un-crossed Order books. Disseminated from 09:15 and then in real time if information is changed

Figure 2 Schedule for a typical Pre trade and Opening Call session at 09:30 (local time)

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 and GTD) entered prior to the current trading day will keep their time priority.

4.2.3 Closing call

Continuous trading ends at 15:25 followed by a Closing call period with no auto matching. The Closing call period lasts between 4:30 and 5:00 minutes and ends with the closing call uncross which takes place from 15:29:30 to 15:30:00. Order entry and full order management is available during the Closing Call.

Orders with time-in-force conditions Day, Good-Till-Cancelled and Good-Till-Date are transitioned automatically into the Pre-close and are eligible interest for the closing auction. An IOC order entered during Pre-close is eligible for execution in the closing call uncross.

	Continuous trading	Closing call
	09:30 – 15:25	15:25 – ~15:30
Order management	Full order management Order entry: DAY, GTC, IOC, GTD, GTS and FoK. Order cancel and cancel/replace allowed Request for Quote allowed	Full order management Order entry: DAY, GTC, IOC, GTD and GTS. Order cancel and cancel/replace allowed
Auto matching	Yes	No
Market by order transparency	Unexecuted DAY, GTC, GTD, GTS orders from the opening uncross enter continuous market, IOC orders are cancelled Continuous book displayed orders are disseminated, non-displayed and non-disclosed Reserve (Hidden iceberg) volumes are not disseminated	No Market By Order transparency.
Equilibrium data	No	Equilibrium price (EP) with indicative traded volume based on all Orders. Best Bid and Offer volumes and prices, excluding non-display Orders, are disseminated for un-crossed Order books. Disseminated from 15:25 and then in real time if information is changed

Figure 3 Schedule for market closing with Closing call at 15:25 (local time)

4.2.4 Equilibrium data

During Calls individual orders are not displayed in the public data feed and "Pre-trade transparency" is available via real time Equilibrium data with the following indicative information provided:

- Equilibrium price (if crossed)
- Traded volume (if crossed)

Best Bid and Ask prices and volumes will be displayed during calls and are defined based on all orders except Market and Non-displayed orders.

The Equilibrium Opening/Closing Price is based on all orders (Day, GTC, GTD, GTS, IOC, Non-displayed) and includes all Order volume. The Equilibrium Price is disseminated in valid prices (i.e. using the relevant tick size table).

4.2.5 Price determination

The opening auction collects orders on both sides of the order book for a period of time and then execute all matching orders at a single price (the equilibrium price) that maximizes the executable quantity and minimizes the surplus. The last part is called uncross because it removes all crossing prices in the order book. The uncross takes place in the transition between pre-trading and (continuous) trading.

The equilibrium price (EP) algorithm has the following price selection rules:

1. The prices used in the selection of EP are all existing prices between the highest and the lowest price where limit orders exist, extended with one tick up from the highest and one tick down from the lowest price. Choose the price or prices that maximize the quantity traded.

2. When more than one such price exists, i.e. there are several candidates as a result from step 1; the surplus quantity shall be minimized.

3. When more than one such price exists, i.e. there are several candidates as a result from step 2, the market pressure shall decide.

4. When more than one such price exists, i.e. there are several candidates as a result from step 3, use the price closest to the reference price.

   The following reference prices might be used:

   - Last price

   - Closing price

   - Reference price received from an external source or

   - Manually entered by the exchange

   If no reference price is specified/defined in Genium INET the system will choose the average of the highest and lowest eligible EP prices rounded to the nearest tick.

When the equilibrium price has been determined, all orders that are more generous than this price are filled, or partially filled based on the available volumes on the opposite side.

It is not possible to calculate an EP when:
- No crossing orders exist.
- Only market orders exist in the order book

Included in the Equilibrium Price Calculation are:
- Limit orders
- Market orders
- Reserve orders (using their entire specified quantity)
- Undisclosed orders

4.2.6 Volume allocation

Allocation follows price-internal-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.
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.

Volume with any non-display attribute has lower priority than corresponding volume without non-display attribute.

4.3 Manual trades in the Pre-Open session

Manual Trades made during the Pre-trade Session must be reported before the execution of the uncross. Manual Trades which are entered into during the period commencing three minutes prior to continuous trading must be reported as close to real-time as is technically possible and in any case within three minutes after continuous trading starts.

4.4 Continuous trading

Trading in the Order Book in accordance with the Nasdaq Nordic Member Rules results in On Exchange trades. During continuous trading, manual trades can be registered with trade types specified in chapter 5 and Request for Quotes can be sent as specified in chapter 6.

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.

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 of 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 of the incoming sell order until the limit of the crossing prices is passed.

The priority order at the same price level is first internal (where the incoming order is executed against the member's own orders[3]), 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 with Counterparty information. This applies equally to reported and auto-matched trades.

4.5 Terminating

This session is primarily used to close down the market in an orderly manner and to create end-of-day trading statistics. This session will last approximately 5 minutes from ~15:29:30 to 15:35:00.

During termination, orders can neither be cancelled nor changed, but trade reporting is allowed. Cancellation of trades is possible. By the end of this session closing prices and other trade statistics from that trading day are finalized.

Pre- and post-trade information is publicly available.

4.6 Post-Trading

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

	Post-trading
	15:35-16:00
Order management	Order cancel
Auto matching	No
Market by Order transparency	Market By Order transparency
Equilibrium data	No

Figure 4 Schedule for the Post-Trading Session (local time).

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

-Order cancellation
-Off hours transactions

Trade cancellations are made in accordance with NMR.

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.

4.7 Closed

Participants have no access to the markets in the closed session.

4.8 Trading halts

Trading may be suspended by Nasdaq Iceland either due to technical reasons or regulatory reasons. Suspensions are regulated in NMR.

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 or Order Books.

4.8.1 Stop codes

All stop reasons are 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 NMR. Trading must be suspended if a technical disturbance causes a major part of the Members (market shares) to lose connection to the markets.

Suspensions due to regulatory reasons (manual)
On Nasdaq Nordic, 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 Nordic encounters a situation of 'unfair market conditions' a trading halt is considered.

Trading halt (TH) is used when trade is halted for regulatory reasons:

- **Trading halt (TH)**

The trading 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 to orders are not permitted, however an order may be cancelled from the order book
- Orders placed on an order book prior to the trading halt will or may be cancelled
- Manual trades may not be reported
- Manual Trades entered into prior to the trading halt shall be reported immediately as soon as trading has resumed

4.8.2 Resuming trading after a halt

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. It is also possible to "flush" the order book before resuming trading according to NMR.

All active orders in a suspended (halted) order book will be cancelled. However, if the reason for a short term suspension (halt) is technical or administrative Nasdaq Iceland may decide that the order books will not be flushed.

If resuming trading after a suspension with an auction, the pre-call auction state will last 10 minutes. Following the auction uncross the order book will enter the continuous trading state.

In case there are less than 10 minutes to the next auction (e.g. closing auction) the pre-call state will be shorter than 10 minutes, uncrossing the Order book, without any Continuous Trading in-between.

4.9 Notification Codes

Notification codes are used by Nasdaq to indicate the trading status of listed instruments.

Only the note code "OB" indicating that an instrument is on the observation list is currently used on the Icelandic fixed income market.

4.10 Circuit Breaker

A circuit breaker is an automatic mechanism for temporarily constraining trading in case there is a sudden significant price movement. The order book will change trading mode to auction (call) or the opening auction will be extended (call).
A Circuit breaker will be triggered when a possible match deviates too much from the reference price. The reference price is the last closing price.

During continuous trading the length of the auction will be 90 seconds, and during this state order management is allowed and matching is carried out according to the same rules as the opening call.

See Appendix C for more details and configuration

4.11 Self-Match Prevention

Self-Match Prevention is an optional functionality for the Member. The Self-Match Prevention (SMP) functionality may be used by Participants to avoid unintentional internal trading by preventing certain Orders (within the same MPID) from executing against each other. The aim with the functionality is to facilitate Members' compliance and risk management duties and needs.

See Appendix F for more details.

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 Nordic Member Rules. Manual Trades are trades, which are made outside the Order Book as well as reported in accordance with Nasdaq 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. Manual Trades reported on the following trading day 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 Trade Reporting

Each member reports its own leg of the trade for matching in Genium INET. When both parties have reported their legs, and the required data match, the trade is accepted.

When the first leg is received by the system, a trade report notification message will be sent to the participant specified as the counterparty in the trade report transaction.

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 Reporting

One member reports both legs of a trade. This is always the case for client trades but may also be used for trades between two members.

5.4 Trade cancellation

Trades may be cancelled by Nasdaq Nordic or by the trading parties themselves. Cancellation rules are specified in NMR.

As a general rule, a cancellation request must be received by the relevant exchange within ten (10) minutes after the trade was registered in the trading system in order to avoid misinformation of the market participants.

Cancellations may be handled via the Rectify Trade (private information about the trade) and Rectify Deal (non-private information about the trade) transactions in OMNet. You may also call or e-mail Trading Surveillance.

FIX users shall use the Trade Capture Report – Confirmed Trade Cancel (in) message to cancel trades respectively.

The "external" cancellation functionality can only be used in case the same participant is on both sides of the trade, i.e. when having used the two-party trade reporting. Cancellations always require an acceptance from Trading Surveillance before they are carried through.

For cancellations Trading Surveillance should always be contacted.

Cancellations received during the trading day will be reflected in the trading statistics (high, low, average etc.) immediately. Cancellations received on later trading days will not be included and trading statistics will not be corrected based on these cancellations.

5.5 Trade Types

The following Trade Types are supported for Manual Trades:

Trade type	Id	Definition	OMnet and FIX codes
Standard Trade, On Hour	STND	A Trade concluded on standard market terms in respect of price, time of the trade and with standard delivery and settlement schedule reported on hour in continuous trading. Will update last price.	25
Standard Trade, Off Hour	OSTN	A Trade concluded on standard market terms in respect of price, time of the trade and with standard delivery and settlement schedule reported off hour in all session states except continuous trading. Will not update last price	35
Non-standard settlement	NSTL	A Trade that deviates from the standard settlement and delivery period.	22
Derivative Related Transaction	DRTR	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.	21
Portfolio Trade	PORT	A transaction in more than one security where those securities are grouped and traded as a single lot against a specific reference price.	23
Volume weighted average price	VWAP	A Trade, which price is based on a volume weighted average of trades made within pre-defined time period.	26
Exchange granted trade	XGRT	A Trade pursuant to an individual or general authorization from Nasdaq Iceland.	27

Repurchase Agreement	REPO	Agreement between two parties that regulates the lending and return of the same nominal amount of instruments.	24

Trade report types are used to specify different characteristics of the trades and set the relevant Market Model Typology (MMT)-flags in the trade ticker. Among the required data that must be reported are:

- **Order Book Identity;**
- **Buy or sell code;**
- **Trade price;**
- **Volume;**
- **Identity of counterpart Member;**
- **Time of agreement;**
- **Trade Type;**
- **Capacity (agent/principal/Acting asMarket Maker or Specialist/Issuer Holding/Issue Price Stabilization/Riskless Principal)**
- **Settlement date;**

The technical details of the trade report transactions are described in the OMnet and FIX API specifications.

6 Directed Request for Quote (RfQ)

The Directed Request for Quote functionality makes it possible for market participants to send a private Quote Request (the initiator) in a specific orderbook directed to a single member or a list of members. Members respond to an RfQ by sending a directed executable quote to the initiator. That quote will be visible to other market participants.

Market participants that initiate an RfQ have an exclusive right to trade against any incoming quotes by sending a matching directed quote accept in response to one or more directed quote request responses. The initiator has the ability to select which response, if any, to execute against, meaning the initiator may accept (match against) all or partial quantity for one or several of the RfQ responses. Once that is done there is a match and the trade is executed and published according to the applicable Exchange rules.

The Directed Request for Quote functionality is available during continuous trading.

There may be several RfQ processes for the same orderbook in parallel but one market participant may only be the RfQ Requestor of one RfQ at the same time for the same orderbook. A market participant may though have several RfQs in different orderbooks at the same time.

RfQ information
In order for a market participant to send an RfQ, respond to an RfQ and accept an RfQ, it must include all required order details as described in chapter 6.1 here below.

RfQ lifetime
When an RfQ initiator sends an RfQ, the initiator can define a time limit (RfQ lifetime) by which the quotes may be registered. The timer is set in seconds and the default RfQ lifetime is currently set to 180 seconds but can be configured for each RfQ. After the timer has expired, the quote request is no longer valid and it is, therefore, no longer possible to respond to it.

RfQ Accept time
The RfQ accept time, set in seconds, is the maximum time the RfQ initiator has to respond with an accept transaction in order to trade against an incoming quote.

The RfQ accept time is pre-set at the orderbook level, with the current standard of 60 seconds. The RfQ accept time is though affected by the remaining time of the RfQ requester's selected RfQ lifetime. I.e., the RfQ accept time equals; remaining RfQ lifetime + accept time.

As an example, with 180 seconds RfQ lifetime and 60 seconds standard accept time on an instrument level, if the response to a request is sent after 60 seconds, the RfQ accept time is 120+60 seconds = 180 seconds. I.e., the RfQ Requester has 180 seconds to accept the incoming quote. Combining the RfQ lifetime and the RfQ Accept time, you get the RfQ Total lifetime.

The Total RfQ lifetime = RfQ lifetime + RfQ Accept time.

Cancellations
An initiator is able to delete an active Directed Request for Quote.
The sender of an RfQ response is allowed to cancel the quote and send a new response within the RfQ lifetime provided the RfQ initiator has not already accepted the RfQ response.

Public market data feed
All pre- and post-trade information, i.e., responses to an RfQ, regardless of whether it was traded or cancelled, and matched RfQ transactions are available via public market data feeds, such as OMnet and GCF. The initial Request for Quote if not responded to, is, however, private and not disclosed.

7 Orders

7.1 Required order information

The fields are:
- Order Book Identity
- Price
- Volume
- Buy or Sell
- Order Capacity
- Client Identification
- Investment Decision
- Execution Decision
- Where the order is generated by an algorithm, the algorithm deployed by the member
- Whether the Order is submitted as part of Market Making Agreement or any liquidity provision activity

Client ID, Investment decision within firm and Execution within firm will each have one respective PartyRoleQualifier field which needs to be populated, when mandatory. The Client ID, Investment decision within firm and Execution within firm fields should be populated with a short code. Short codes are created by each member, and shall be mapped up with a LongCode via Member Portal GUI, Member Portal Rest API or Member Portal file upload. Short codes will be saved for a minimum of 5 years and upon request from National Competent Authority, Nasdaq will submit a report in a predefined format.

The fields are only mandatory on order entries.

Order capacity is mandatory on all orders and trade reports. It shall be populated with a value that identifies which kind of trade or order it is. The field is also used to validate when, and if, the Client ID, Investment Decision Maker and Execution Decision Maker field are mandatory.

Short codes 0, 1, 2 and 3 are reserved values. More information about the short codes may be found in the Order Record Keeping guidelines.

7.2 Order types, validity and priority

The following order types, attributes and validity are available on Nasdaq Iceland for Fixed-income and related.

<u>Order Types</u>

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 rejected. It will only execute at prices equal to or more generous than its specified limit price.

Stored limit orders are also valid in call auctions.

Limit orders can be matched in part or in its entirety.

2. Market Order

A market order is an order to sell or buy at the best available price and is therefore entered without a price. During continuous trading the time in force for a market order is always fill-or-kill (the order is matched in full or not at all) or immediate-or-cancel (any remaining quantity will be cancelled). The order is never registered in the order book.

Note that a market order will trade through the order book until the entire quantity is filled. This means that as long as there is an order on the opposite side of the order book there will be a match no matter the price level

Market orders with the time in force "FOK" cannot be placed during call auctions.

Market orders with the time in force "IOC" can be placed during call auctions and are stored; but if not traded always cancelled after the uncross.

3. Market-to-limit order

Market-to-limit order is an order to sell or buy at the best possible price. If the order is partly matched, the remainder is converted into a limit order priced at match price. In comparison with a normal market order, the market-to-limit order only executes at the best price level and, therefore, does not trade through the order book.

During continuous matching a market-to-limit order is immediately cancelled if no match can be executed, e.g. if no order exists on the opposite side of the book.

Market-to-limit orders entered in a non-matching session state are treated as market orders, they form part of the uncross at equilibrium price, and if any quantity remains after the uncross they will be stored in the order book at the equilibrium price.

4. Linked orders

Linked orders provide the functionality to enter more than one order and to state that you want to buy e.g. either 500 lots of Bond X at price A OR 500 lots of Bond Y at price B, OR a combination thereof. The linked order corresponds to a number of single orders with an exclusive OR-condition on the maximum volume level. When a trade takes place

in one of the legs, the volume of the other legs will immediately be reduced proportionally, so there will be no risk of "double trading".

- The maximum number of orders that can be linked is 10.

- All legs in a linked set of orders must contain the same multiple of lot sizes.

See Appendix D for guiding examples.

Order Attributes

1. Reserve Order (Iceberg order)

In a Reserve order, a certain portion of the total volume of an order is displayed in the Order Book (peak). Both the displayed and non-displayed portions of the reserve order are available for potential execution against incoming orders

When the displayable portion of the Order is completely executed within the Order Book, the non-displayable portion of the Order is decremented 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.

Reserve orders are valid and new such orders can be placed during call auctions and during continuous matching. Their total quantity is used for the equilibrium price calculation and the uncrossing. Their total quantity is displayed in market by price information during call auctions. Only the open quantity will be shown during continuous trading.

For fixed income instruments in the Nordic market prioritized internal crossing is used when matching reserve orders a.k.a. iceberg orders. This e.g. implies that a participant will match his/her own order prior to an order of another participant even if the time priority of that order is better.

When reserve orders are matched the presentation of trades is bundled.

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

2. Minimum Quantity (Volume) order

Orders can be entered for execution with a minimum quantity. Displayed 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 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 only be enforced during the continuous market.

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

3. 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 orders have to satisfy minimum size requirements. If the volume was reduced due to a partial execution, the order remains non-displayed even when smaller than the minimum size requirements.

Minimum size requirements are as follows:

Iceland Cash Bond Trading – Size requirement limit: 100 000 000
Iceland FN Bond Market – Size requirement limit: 100 000 000

A hidden order will be accepted if the following criterion is fulfilled:

- If the quantity is as high or higher than the size requirement limit

Non-displayed orders that do not meet the minimum size requirement will automatically be rejected.

In general, the following combinations of order attributes are possible.

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

Time in Force

1. Day order (day)

A day order is valid until the market closes. A day order is active for the trading day, and any non-executed portion will be cancelled at the end of the business day, i.e. when the market enters into post-trading.

2. Good till date (GTD)

A GTD order is valid until a specified date in the future. If the order is not matched during the day it will be inserted again in the order book the next morning when the system opens. A GTD order will retain its original chronological order based on original entry time into the system.

3. Good till Session (GTS)

A GTS order specifies the session type until which the order shall remain in effect. The GTS order will be cancelled in the transition to a session different from the specified session. If you e.g. enter a GTS order in the pre-trade session and this order is not traded in the opening call, it will be cancelled automatically when the market enters into the trading session.

If you enter a GTS order during the Trading session setting the validity session to pre-trade the order will be valid and tradable until end of day, i.e. until the system enters post-trading session, as such orders have a maximum time-in-force of current day.

4. Fill-or-Kill (FOK)

A FOK order is never stored in the order book. If a FOK order is not matched in full on entry, the order is cancelled. FOK orders can only be entered during continuous trading.

5. Immediate-or-cancel (IOC)[4]

If an IOC 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 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.

IOC orders placed during a call auction will be stored in the order book, whereas any remaining part of the order will be cancelled after uncross.

6. 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.

7.3 Order modification

The time priority of an order is kept if the volume is reduced, and lost if the volume is increased or if the price is changed.

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[4] Immediate-or-cancel (IOC is the same as Fill-and-Kill (FAK))

7.4 Order price

If a price is needed, it is expressed in percentage of nominal value e.g. ISK, DKK. Market and Market to limit orders do not include a numeric price value.

7.5 Order Price limits

In continuous matching price limits are calculated as a percentage deviation from a reference price so that incoming bid orders and quotes with prices above the upper price limit, and ask orders and quotes with prices below the lower price limit, are rejected. Bid orders lower than the upper limit and ask order above the lower price limit will be accepted by the system.

Reference Price Calculation
The used reference price calculation for order price limits will be selected according to below table:
Last paid else;
Mid BBO; if no Best Bid Offer then
Best Bid or Offer
If none of above, a Settlement price (last paid) from previous day will be calculated

7.6 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 an instrument, "minimum spread".

The tick size for all instruments and all price levels on the Icelandic Cash Bond market and the Iceland FN Bond Market is 0,005.

Given the tick size specifications, it is worth noting that trades will be displayed with four decimals.

If a limit price is not valid according to the allowed tick sizes, it will be rejected.

7.7 Kill functionality

Upon request, a member can instruct the Exchange to manually cancel one or more orders in the Genium INET trading system according to specifications set by the member. All communications shall be done via recorded phone calls or via e-mails. The member needs to provide their MPID/Participant ID, Trader ID and in which instrument orders are to be cancelled. In the case of recurring algorithmic order issues for a member, the Exchange may choose to suspend the member until the issue is solved.
Cancellation requests are processed during trading opening hours.

Revision History

Date	Revision	Change Description
March 25, 2019	1.0	Initial version for NASDAQ Iceland Fixed-Income Markets
September 10, 2019	2019:02	OMnet and FIX codes for trade types added
October 7, 2019	2019:03	Self-Match Prevention added
January 23, 2023	2023:01	Changes to Appendix C, configuration changes to static circuit breakers and clarification on required order information. Text on market making, Exceptional circumstances and stressed market conditions added. Chapter on kill functionality added
May 8, 2023	2023:02	Introduction of RfQ trading functionality
November 1, 2024	2024:01	Changes in Circuit breaker thresholds Removal of minimum size criterion for manual trades in liquid bonds

Appendix A – Trading statistics

Automatically matched trades update:

- Turnover
- Last price
- High/low

Reported trades with Trade Type "Standard Trade, On Hour" update:

- Turnover
- Last paid price and High/Low price

Reported trades with Trade Type "Standard Trade, Off Hour" updates:

- Turnover

Appendix B: MAQ on non-displayed orders

MAQ Definition
The MAQ shall be defined as the actual quantity (volume) that needs to be met. There is no connection or restriction with regards to the value of the minimum size limit and what value can be set as the MAQ.

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

Non-scheduled Intraday Auction
A non-scheduled intraday auction after circuit breaker or trading/matching halt, Non-displayed 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:
  - GTD (Good Till Date)
  - Day
  - GTC (Good Till Cancel)
  - GTS (Good Till Session)

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.

Another 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.

<u>Exception from aggregation rule on IOC orders</u>
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). There is an exemption for IOCs from the ban against aggregating shares in order to preserve legacy behaviour and continued support of FOK.

<u>Orders not cancelling after leaves fall below MAQ</u>
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 C: Circuit Breakers

Circuit Breaker definition
A circuit breaker is a trading pause and resumption process designed to restore an orderly market in a single Order Book. The Static circuit breaker will be utilized if a proposed Trade deviates too much in percentage from the reference price, which is normally the day's opening price or yesterday's last price.

When the circuit breaker is triggered, continuous trading is halted followed by an auction period, after which the Order Book moves back to continuous trading.

Static Circuit Breaker
The Static circuit breaker 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 trigger of a Static circuit breaker will lead to a trading interruption and a call auction where a new reference price will be formed if auction results in an uncross.

Static Circuit Breaker Halt Auctions
When the Static circuit breaker 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 90 seconds. The auction period always ends with an uncross. Right after the uncross the Order Book moves into continuous trading again. There will be no auction triggered if there is less than 120 seconds before the closing auction.

The auction has all the characteristics and rules for Auction period Order management as a normal halt auction. 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.

Configuration

Circuit breaker thresholds are set at 3% for benchmark Treasury bonds and covered bonds and 5% for all other bonds.
The configuration is set on Order Book level. Individual Order Book configuration is displayed in the reference data. Intraday updates widening the thresholds or removing them may occur when normal trading in an illiquid Instrument is hindered by the general percentages set at start of day. This can also occur in rare situations when there is a well known movement in the instrument leading to a situation where Nasdaq Iceland decides to remove 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. Intraday updates to threshold levels are published in market notices.

Appendix D: Linked Orders

Linked orders increase the possibility for a trader to fill his order by trading different securities. An example: A trader wishes to buy/sell a 10 year bond but is indifferent with respect to which bond. He submits a linked order that stipulates trading either 100 of bond A or 100 of bond B or a combination of the two.

Note: all legs in a linked set of orders must contain the same multiple of lot sizes.

If one order is executed in full, the other(s) is cancelled. If one order is executed partially, the other(s) is decreased proportionally.

Example: Linked order traded in full

Buy instrument A, Qty 50, limit 11.50

or

Buy instrument B, Qty 50, limit 16.00

Assume lot size is 1 for both legs

Order Book A			
80	$11.40	$11.50	30
50	$11.30	$11.80	100

Order Book B			
40	$15.60	$16.00	110
20	$15.50	$17.00	100

Start matching first leg.

30 of A will be bought at 11.50 (inside the given price).

The second leg must be decreased accordingly by calculating the proportion to regard as executed:

Remaining quantity for second leg is decreased by 50*30/50 = 30, leaving the quantity at 20 (50 – 30).

Order Quantity of instrument B is then changed to 20 in the order book

The second leg will be matched at 16.00, thus executing the linked order in full, although in different securities.

Appendix E: Public Market Information

Following information on Orders in Fixed Income Instruments is considered Public Market Information on Nasdaq Nordic including the respective First North markets in accordance with NMR 3.3.3:

Pre-Trading Phase	Pre-open	None
	Opening Call	Indicative auction price (Equilibrium price) Indicative Tradable volume at Equilibrium price Best Bid price Best Ask price Bid volume at best price level Ask volume at best price level
Trading Hours	Automatic Order Matching	The aggregate number of Orders at five best bid and offer price levels
	Halt auction, Closing Call	Indicative auction price (Equilibrium price) Indicative Tradable volume at Equilibrium price Best Bid price Best Ask price Bid volume at best price level Ask volume at best price level
Post-Trading Phase	Post-trade	None

Following information on Trades in Fixed Income Instruments is considered Public Market Information on Nasdaq Nordic including the respective First North markets in accordance with NMR:

- Trading date and time
- Instrument identification code
- Price
- Price currency
- Volume
- Venue of execution
- Publication date and time
- Transaction identification code
- Counterparty Information (Member id)

Appendix F: Self match prevention

Self-Match Prevention is an optional functionality for the Member. The Self-Match Prevention (SMP) functionality may be used by Participants to avoid unintentional internal trading by preventing certain Orders (within the same MPID) from executing against each other. The aim with the functionality is to facilitate Members' compliance and risk management duties and needs.

The self-match prevention functionality can be activated for a Member or a subset of traders of a Member. If activated on Member/Participant level, then all orders coming from the Member having the same match prevention ID will be prevented from matching with each other. If instead activated on trader level, then only the orders coming from traders having the functionality activated and having the same match prevention ID will be prevented from matching with each other. It is not possible to use the functionality for preventing orders placed with different Participant IDs (MPIDs) from executing against each other

Please note that the Member is in all situations, even when and if the functionality is applied, responsible for all its Trades and Orders, including not violating the Nasdaq Nordic Member Rules as applicable from time to time and/or applicable legislation.

Description of the functionality
Self-match prevention is supported on single orders messages on OMnet or FIX. The functionality is not active for orders placed in combination order books and not for implied orders. The range of valid match prevention ID values to be provided with order messages is 0-255. If no value is specified at entry, then the matching engine will treat the order as having match prevention ID set to '0' (zero). This means that Members that want to prevent all orders from matching with each other only needs to activate the functionality for the relevant Participant code (MPID) without having to actively specifying match prevention ID on incoming orders. Members will be notified of cancelled orders as the result of self-match prevention in firm order book and execution report messages on OMnet and FIX respectively. Full technical details are available in the relevant OMnet and FIX protocol specifications.

The SMP-action is undertaken by the trading system in order to prevent a Self-Match. The action is always to cancel the passive order.

Members can activate the SMP-functionality via member portal.