

APPROVED

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# TRADING SPECIFICATIONS

1. These Trading Specifications have been established on the basis of section 4.1.3 of the Member Rules of Nasdaq Riga (hereinafter referred to as the Rules).

*(amended on November 11, 2015; effective from November 16, 2015)*

2. The purpose of these Trading Specifications is to specify the technical requirements and other specific requirements and criteria which are necessary in order to perform transactions in the Exchange trading system in accordance with the Rules of Nasdaq Riga (hereinafter referred to as the Exchange).

*(amended on November 11, 2015; effective from November 16, 2015)*

3. Terminology used in the Trading Specifications corresponds with the terminology used in the Rules.

4. The following issues are regulated in the Trading Specifications:

4.1 Exchange day structure and activities during the trading session (Annex 1);

*(Annex 1 amended on January 19, 2010; Effective from February 8, 2010)*

4.2 Opening call auction, closing call auction and equilibrium price (Annex 2);

*(Annex 2 amended on January 19, 2010; Effective from February 8, 2010)*

4.3 Order types, validity and priority (Annex 3);

*(Annex 3 amended on January 19, 2010; Effective from February 8, 2010)*

4.4 Rules for determining the volume weighted average spread in manual trades (Annex 4);

4.5 Tick size, lot quantity, Volatility Guard and auction Safeguards (Annex 5);

*(amended on November 28, 2014; Effective from December 1, 2014)*

4.6 The procedure and timeframe for releasing information about the manual trades (Annex 6);

*(Annex 3 amended on January 19, 2010; Effective from February 8, 2010)*

4.7 Thresholds for block trade (Annex 7);

*(4.8. null and void from 1 November, 2007)*

4.9 *(null and void from January 1, 2014)*

4.10 Kinds and types of transaction (Annex 10);

*(Annex 3 amended on January 19, 2010; Effective from February 8, 2010)*

*(4.11. null and void from 1 November, 2007)*

4.12 Determining of price for fixed-income instruments and determining of settlement amount of trades, executed on equity and fixed income markets (Annex 12);  
*(amended on November 10, 2010; Effective from November 22, 2010)*

4.13 Rules on the procedures for initial placement and buybacks of Latvian government securities in the trading system of the Exchange (Annex 13);

4.14 Calculation of average volume weighted price (Annex 14).  
*(amended on February 25, 2009; Effective from February 27, 2009)*

## Exchange day structure and activities during the trading session

The tables included in the present Annex lay down the structure, schedules for the trading day and the transactions, which are permitted in the Order Book in the respective time period, for each individual sub-market.

### I Equity market

**Market segments: shares; fund units; issue instruments**

Period	Period breakdown by transaction	Time	Transactions		
			Order management <sup>1</sup>	Automatic order matching	Manual trades
<b>Pre-trading session</b>	<i>Period before opening call auction (Pre-Open)</i>	09:00-10:00	Yes	No	Yes
<b>Trading hours</b>	<i>Opening call auction (Uncross)<sup>3</sup></i>	~10:00	Yes	Yes	Yes
	<i>Continuous trading</i>	10:00-15:55	Yes	Yes	Yes
	<i>Period before closing auction (Pre-close)</i>	15:55:~16:00	Yes	No	Yes
	<i>Closing call auction (Uncross)<sup>4</sup></i>	~16:00	Yes	Yes	Yes
<b>Post-trading session</b>	<i>Post-trading session</i>	~16:00-16:30	Yes <sup>2</sup>	No	Yes
<b>Off-trade period</b>	<i>Off-trade period</i>	16:30 - 09:00	No	No	No

**Notes:**

„Yes” – transaction is permitted.

„No” – transaction is prohibited or technically restricted.

<sup>1</sup> – Order entering, modification, cancellation. Where the number of financial instruments in the order is reduced, the priority in the Order book is retained; any other modifications shall be done via cancelling the previous order and entering a new one, thus creating a new priority in the Order book.

<sup>2</sup> – Orders may be only cancelled, or modified without changing the quantity or price.

<sup>3</sup> – The Uncross in the Opening Call is subject to a 5 second randomization among the Order books, i.e., the individual Order books may open randomly between 10:00:00 – 10:00:05.

<sup>4</sup> - The Uncross in the Closing Call is subject to a 30 second randomization among the Order books, i.e., the individual Order books may uncross randomly between 15:59:30 – 16:00:00.

*(amended on November 11, 2015; effective from November 16, 2015)*

## II Fixed - income market

### Market segment: RSE Bonds Automatch

Period	Time	Transactions			
		Order entering	Order modification	Order cancellation	Manual Trades
Trading Hours (TRAD)	10:00–16:00	Yes	Yes	Yes	Yes
Terminating (TERM)	16:00–16:05	No	No	No	No
Post-trading session (POTR)	16:05–16:30	No	No	Yes	No
Off-trade period (CLSD)	16:30–10:00	No	No	No	No

### Market segment: RSE Bonds

Period	Time	Transactions			
		Interest entering	Interest modification	Interest cancellation	Manual trades
Trading Hours (INDIC)	10:00–16:00	Yes	Yes	Yes	Yes
Terminationg (TERM)	16:00–16:30	No	No	No	No
Off-trade period (CLSD)	16:30–10:00	No	No	No	No

„Yes” – transaction is permitted.

„No” – transaction is prohibited or technically restricted.

## Opening call auction, closing call auction and equilibrium price

The Annex lays down the procedure for carrying out an opening call auction and closing call auction (hereinafter – collectively "Auction") and the principles for determining the equilibrium price.

1. Auction is applied only on the equity market and on its sub-markets.
2. The auction consists of two phases: order management and order matching (uncross).
3. In Call, all valid orders placed in the Order Book before the Call are automatically matched and executed at equilibrium price.
4. Equilibrium price is determined only in case when in the specific Order Book the highest buy price is higher or equal to the lowest sell price.
5. Equilibrium price is a price:
  - 5.1. that maximizes the number of shares at the time of the uncross to be executed;
  - 5.2. where more than one price exists under 5.1, the uncross shall occur at the price that minimizes any imbalance in the Order book;
  - 5.3. where more than one price exists under 5.2, the uncross shall occur at the price in the bid/ask orders with the highest quantity of equities;
  - 5.4. where more than one price exists under 5.3, 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.
6. Procedure of execution of orders (priorities):
  - 6.1. at first, orders where the given price is equal or better than the equilibrium price are automatically matched, whereas the transaction price is the equilibrium price. In case of buy orders the best price is higher than the equilibrium price, and in case of sell orders the best price is lower than the equilibrium price;
  - 6.2. in case the same price has been given to several orders, the order, which is placed (reported) in the Order Book at an earlier time (FIFO), shall be executed (automatically matched) at first.
7. If the rules determining the validity of the order do not provide otherwise, the orders that were not matched during the opening call auction shall remain in the Order Book.

## Order types, validity and priority

This Annex lays down the types of transactions, which can be placed in the Exchange trading system, as well as the conditions of orders and the order matching priority principles:

### I Matching Priority

1. Orders in the Order Book will be matched according to the following priority:
  - 1) by price;
  - 2) by displayed volume: orders with displayed volume have a priority over non-displayed orders;
  - 3) by the time the order reached the Order book (time priority).

### II Order types, attributes and validity: equity market

#### 2. Order types

**2.1. Limit order** – a Limit order stipulates a maximum purchase price or minimum selling price. Order is executed either fully or partially by automatically matching it

A Limit order valid exclusively for Opening call auction (LOO) or Closing call auction (LOC) shall be admitted. A Limit order for Opening or Closing call auction shall mean an order to buy or sell at a specified price or better. The order shall be valid only till the close of the respective auction; when matched, it will be executed at the equilibrium price of the respective auction.

*(amended on November 10, 2010; Effective from November 22, 2010)*

**2.2. Market order (MKT)** – a market price is an order to sell or buy a financial instrument at the current market price during continuous trading (Trading Hours) with Time-in-Force condition Immediate-or-Cancel (IOC).

Where a Market order has been entered in the Order book before an Auction where orders are matched, the entered order is valid for the respective auction.

Order is executed only in case if full or partial execution of the order is possible, by automatically matching it. In case of partial execution of an order, the order for non-executed quantity is automatically cancelled.

It is possible to enter a Market order exclusively for an Opening Call Auction (MOO) or a Closing call auction (MOC). A Market order for Opening or Closing call auction shall mean an order to buy or sell at market price the volume specified in the order. The order shall be valid till the close of the respective auction; when matched, it will be executed at the equilibrium price of the respective auction.

At Opening or Closing call auctions, Market orders have a priority over Limit orders.

**2.3. Imbalance order (IOOP or IOOC)** - an order type that is executed at the equilibrium price during an Opening or Closing call auction. It is possible to enter an Imbalance order for an Opening Call auction (IOOP) or a Closing call auction (IOOC).

Imbalance orders shall not affect the equilibrium price and shall be executed only against the residual volume of financial instruments subsequent to the respective auction. Imbalance orders may not be crossed.

Imbalance orders have a lower priority compared to other order types. Internally, they are time-prioritized.

#### 3. Order attributes

**3.1. Reserve order/iceberg order** - an order where 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.

In case of the condition “With hidden quantity” for the order, the order is automatically added with the next provided quantity for execution (number of financial instruments) after the order quantity, which is shown in the Order Book, is fully executed (matched), and this added order loses its time priority for other orders placed with the same price.

3.2. **Minimum quantity order** – an order can be entered for execution with a minimum share quantity.

In case the only order attribute is „minimum quantity order”, i.e. it is not combined with any other order attribute, it is only accepted during continuous trading with a time in force IOC.

3.3. **Non-displayed order (Hidden order)** - orders are hidden from other participants than the participant entering it. To qualify as a Hidden order, the order has to be sufficiently large in scale to meet the Block transaction limits specified in Annex 7 of the Specifications. Where a Member enters or modifies a Hidden order with a volume falling short of the Block transaction limits, this order shall automatically acquire a Time-in-Force condition Immediate-or-Cancel (IOC) (by default) or will be rejected (by an option earlier specified by the Member). Where the volume in the order decreases as a result of partial execution and the remaining part is smaller than the limit set for block transactions, the order shall remain non-displayed for other market participants.

3.4. **Pegged order** – the order is priced relative to the current market price of the financial instrument. The price is pegged to the Best Bid Offer (BBO) (where the Pegged orders have not been taken into consideration) with an incremental difference (a tick) from the BBO. Pegged orders have their price automatically adjusted by the Trading System in response to changes in BBO prices, and a new timestamp is created for a pegged order each time it is automatically adjusted.. A Pegged order may specify the highest permissible buying price or the lowest selling price beyond which the order shall not be executed (protection price); in case the order is executed in full or partially, there is no price disadvantage compared to the highest buying price or the lowest selling price.

The following types of Pegged orders are possible: primary peg – peg an order to the same side of the BBO of an Order Book, Market peg- peg an order to the opposite side of the BBO of an Order Book and Mid-point peg peg an order to the mid-point of the BBO of an Order Book.

Mid-point Pegged orders and BBO Pegged orders shall be entered to the system only as non-displayed (hidden) orders and thereby comply with all criteria set forth for this order type, including the order size that should correspond to the Block transaction limits laid out in Annex 7 of the Specifications.

#### 4. Order validity (Time in Force)

4.1. The orders to be entered in the Order book shall specify Time-in-Force – either till a specific time in the Trading session, till a certain date, or until certain conditions set in. The following types of validity may be used:

- 1) **Immediate or cancel;** IOC (also known as Fill and Kill (FAK) – Order is executed only in case if full or partial execution of the order is possible, by automatically matching it. In case of partial matching of an order, the order for unmatched quantity is automatically cancelled;
- 2) **Good till market close/ Day order** – the order is valid until the close of the Exchange trading session;
- 3) **Good till cancelled;** GTC – the order is valid until it is cancelled. If the order is left overnight, it will be inserted again in the order book the morning of the next Exchange day at the opening of the Trading Session. The GTC orders will retain their original chronological order based on original entry time into the Trading system.;
- 4) **Good till time;** GTT – the Order is valid until a specified time of the day it has been entered in the Order book.

In case validity term has been indicated in the order and the order has not been executed in full until such term, the order is automatically cancelled.

5. For more details on compatibility of individual order types and order attributes, their applicability to different periods in the Trading session and validity, please consult „Nasdaq Nordic Market Model”.  
(amended on November 11, 2015; effective from November 16, 2015)

### III Order types, attributes and validity: fixed income market

6. The terms in this chapter are used in the same meaning as in the previous chapter herein.

#### 7. Order types:

7.1. **Limit Order** - a Limit order stipulates a maximum purchase price or minimum selling price. Order is executed either fully or partially by automatically matching it.

7.2. **Market Order** – a market order is an order to sell or buy at the best available price and is therefore entered without a price. A market order will trade through the order book until the entire quantity is filled.

7.3 **Market –to-limit Order** –a 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.

7.4. **Linked order** – 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 (If one order is executed partially, the other(s) is decreased proportionally).

If one order is executed in full, the other(s) is cancelled. The maximum number of orders that can be linked is 5.

#### 8. Order attributes:

8.1. **Reserve order/iceberg order;**

8.2. **Fill or Kill (FoK)** – the order is executed only in case if full and immediate execution of the order is possible, by automatically matching it with one or several corresponding orders. The order is cancelled automatically if full and immediate matching is not possible.

8.3. **Fill and Kill (FaK)** - the order is executed only in case if immediate full or partial execution of the order is possible by automatic matching. Where an order is executed partially, the unmatched quantity of the order is cancelled automatically.

#### 9. Order validity (Time in Force):

9.1. **Good till market close/ Day order.**

9.2. **Good till date (GTD)** – the order is valid until a specified date in the future.

10. For more details on compatibility of individual order types and order attributes, their applicability to different periods in the Trading session and validity please consult “Genium INET Market Model for Fixed Income”.

### Determining of Volume Weighted Average Spread in Manual Trades

The Annex provides detailed rules for determining Volume Weighted Average Spread as well as gives an example of Volume Weighted Average Spread calculation.

1. For the purposes of Volume Weighted Average Spread calculation, volume weighted average buy price or volume weighted average sell price is the volume weighted average price at which a Member would be able to conclude a Trade of specified volume in the Order book (only buy or sell order volumes displayed in the Order book are used for calculations).
2. Volume Weighted Average Spread depends on the volume of the planned Manual Trade, against which the volume weighted average prices of buy and sell orders in the Order book are calculated.
3. An example of Volume Weighted Average Spread calculation:

Before Volume Weighted Average Spread was introduced, a Manual Trade of buying, e.g., 250,000 shares, depending on the Orders in the Order book, could be concluded within the price spread between 109.75 and 110.00. Applying the Volume Weighted Average Spread, the same Manual Trade can be concluded within a wider price spread, i.e., 109.49 and 110.19.

Orders in the Order Book:

Number	Buy	Sell	Number
96200	109.75	110.00	121500
75800	109.50	110.25	67800
50000	109.25	110.50	55950
25000	109.00	110.75	23400
<u>20600</u>	<u>108.75</u>	<u>111.00</u>	<u>58800</u>
<b>267600</b>	<b>109.44</b>	<b>110.37</b>	<b>327450</b>

Calculation:

$$[(110.00 \times 121,500) + (110.25 \times 67,800) + (110.50 \times 55,950) + (110.75 \times 23,400)] / 250,000 = \underline{110.19}$$

$$[(109.75 \times 96,200) + (109.50 \times 75,800) + (109.25 \times 50,000) + (109.00 \times 25,000) + (108.75 \times 20,600)] / 250,000 = \underline{109.49}$$

## Tick size, Lot quantity, Volatility Guard and auction Safeguards

This Annex lays down the Tick size, Lot quantity, Volatility Guard and auction Safeguards.

### 1. Tick size

1.1. Tick size in the equity market (by exception for fund units), according to the currency in which the financial instrument is listed in the lists of the Exchange, is as follows:

Price	Tick size ( EUR, USD)
0.000 – 0.999	0.001
1.00 – 9.99	0.01
10.00 and above	0.1

The Tick size does not apply to Manual Trades. (In Manual Trades up to 5 decimals in price are possible).

1.2. Tick size in the sub-market of fund units, according to the currency in which the fund units are listed in the lists of the Exchange:

- 1) 0.0001 EUR;
- 2) 0.0001 USD;
- 3) 0.0001 RUB.

The Tick size does not apply to Manual Trades. (In Manual Trades up to 5 decimals in price are possible).

1.3. Tick size in the fixed-income market is:

- 1) in the market segment RSE Bonds: 0.0001%;
- 2) in the market segment RSE Bonds Automatch: „clean price” (price excluding accrued interest) 0.000001%;
- 3) in the market segment RSE Bonds Automatch: yield (accrued interest) until maturity 0.0001%.”

1.4. Tick size for debt securities (fixed income instruments) in multilateral trading facility Alternative market *First North* is 0.0001.

### 2. Lot quantity

2.1. Lot quantity is 1 (one).

### 3. Volatility Guard

A Volatility Guard is an automatic 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).

For more details on mechanism, thresholds, terms and other conditions of Volatility Guards, please consult „Nasdaq Nordic Market Model”.  
(amended on November 11, 2015; effective from November 16, 2015)

### 4. Safeguards in opening and closing auctions

Auction safeguards are to limit unexpected impact to opening or closing prices due to erroneous or extraordinary order entries during opening and closing auctions. The auction safeguards will trigger an extension period to the

opening and closing auctions in a single order book, if the proposed auction price of that order book deviates too much in percentage from a reference price at the time of the uncross.

For more details on mechanism, thresholds, terms and other conditions of safeguards, please consult „Nasdaq Nordic Market Model”.

*(amended on November 11, 2015; effective from November 16, 2015)*

### The procedure and timeframe for releasing information about Manual Trades

1. The information about Manual Trades is released in accordance with the Member Rules and the additional provisions set out in this Annex.
2. The information about Manual Trades that do not comply with the provisions of Item 3 of this Annex shall be released by the Member according to the below described procedure:

Time of Manual trade	Timeframe for information release
Trading hours	Immediately, but not later than 3 (three) minutes after concluding the Manual trade.
The period starting with 3 (three) minutes prior to the closure of the Trading hours (3 minutes prior the end of the Closing call auction) provided that it has been impossible to release the information on the Manual trade during the Trading hours.	During the Post-trading session, but not later than 3 (three) minutes after concluding the Manual trade.
Post-trading session	Immediately, but not later than 3 (three) minutes after concluding the Manual trade.
The period starting with 3 (three) minutes prior the closure of the Post-trading session provided that it has been impossible to release the information on the Manual trade during the Post-trading session.	Not later than in the Pre-trading session on the following Exchange day.
Off-trade	Not later than in the Pre-trading session on the following Exchange day.
Pre-trading session	Not later than before the opening of Trading hours.
The period starting with 3 (three) minutes prior the opening of Trading hours provided that it has been impossible to release the information on the Manual trade during the Pre-trading session.	Immediately, but not later than 3 (three) minutes after concluding the Manual trade.

Where a Manual Trade cannot be reported within the aforementioned time limits due to technical disruptions in the Member's Technical Equipment, the information on Manual trades shall be reported as soon as the technical impediment has ceased. A Member shall, without delay, notify the Exchange on any obstacles to timely report of the information on concluded Manual trades.

3. A Member may delay the release information about the Manual Trade, provided it has been concluded with the Member's client and the volume corresponds to the volumes specified in EC Regulation No. 1287/2006 (Table 4), however, observing the timeframe specified by the Regulation.

## **Block transaction limits**

Block transaction limits depend on the average daily turnover of the share in question and is set according to the provisions of EC Regulation No. 1287/2006 about large transactions compared to the standard market size. Information on Block transaction limits is available on the Exchange trading system.

## Kinds and Types of Manual Trades

This Annex defines the kinds and types of Manual Trades, and the periods when the respective kind of trade may be used in the Trading system, as well as procedure for conducting individual types of trades.

### 1. Kinds of Manual Trades:

Kind of Manual trade	Name in the Trading system	Description
Standard	<i>Standard Trade</i>	A Manual Trade that has been concluded in compliance to standard requirements with regard to price, time and settlement. Trades below the Block transaction limits have to be made within the volume weighted average spread. Where it is impossible to establish volume weighted average spread, the Manual trade shall be executed at a price that reflects the current market value.
Non-Standard	<i>The types are described in the Tables under Items 2 and 3 of this Annex</i>	A Manual Trade that, due to reasonable circumstances, is being concluded at a price that does not correspond to the current market value or at a price that has not been set within the respective price spread if the spread would be applicable in a standard situation

### 2. Types of Non-Standard Manual Trades: equity market

Type of Non-Standard trade	Description
Derivative related transaction	Manual Trade or transfer related to derivative contract execution or expiry, requiring a swap or trade of financial instruments.
Portfolio Trade	Manual Trade with more than one financial instrument provided these instruments are grouped and traded as a portfolio at a specified reference price.
Volume weighted average price transaction	Manual Trade that has been concluded as result of executing more than one order, and the settlement is at volume weighted average price
Non-standard settlement	Manual Trade, which settlement date deviates from the standard delivery and settlement schedule. Settlement date T+0 is accepted.
Exchange Granted trade	Other type of Non-standard Manual Trade (not listed in this Table). A Member shall obtain an approval from the Exchange prior to registering other type of trade in the Trading System.

(amended on May 30, 2012; Effective from June 4, 2012)

### 3. Types of Non-Standard Manual trades: fixed income market

Type of Non-Standard trade	Name in the Trading system	Description
Derivative related transaction	<i>OX Exchange granted trade (XGRT)</i>	Manual Trade or transfer related to derivative contract execution or expiry, requiring a swap or trade of financial instruments.
Portfolio Trade	<i>OX Exchange granted trade (XGRT)</i>	Manual Trade with more than one financial instrument provided these instruments are grouped and traded as a portfolio at a specified reference price.
Volume weighted average price transaction	<i>OX Exchange granted trade (XGRT)</i>	Manual Trade that has been concluded as result of executing more that one order, and the settlement is at volume weighted average price.
Repurchase agreement	<i>OX Exchange granted trade (XGRT)</i>	Manual Trade related to execution of an agreement regarding borrowing and returning of financial instruments.
Non-standard settlement	<i>OX Exchange granted trade (XGRT)</i>	Manual Trade with settlement period other than standard settlement cycle T+2.
Exchange Granted trade	<i>OX Exchange granted trade (XGRT)</i>	Other type of Non-standard Manual Trade (not listed in this Table). A Member shall obtain an approval from the Exchange prior to registering other type of trade in the Trading System..

4. In case the terms and conditions of the Manual Trade do not correspond to the ones in the notification submitted to the Exchange, the Exchange is entitled to cancel the trade, modify the kind of transaction or request the Member to make the necessary modifications, as well as exclude the trade from the transactions on which the calculation of Last Paid Price is based.
5. Where a Member has concluded a Non-standard Manual Trade, the Member shall, upon the Exchange's request, supply the reasons justifying the choice of the said type of trade.
6. Standard Manual trades where the information has been released during Trading hours and the price is within the volume weighted average spread at that particular moment shall have an effect on Last Paid Price.

## **Determining of price for fixed-income instruments and determining of settlement amount of trades, executed on equity and fixed income markets**

These Specifications define the principles for order and interest entry and determining of price of order for fixed-income instruments and determining settlement amount of trades executed on equity and fixed income markets.

1. Placing interest or registering a transaction with fixed income instruments in the fixed income market segment with no automatch (the order book is linked to market segment **RSE Bonds**), the principles to be followed are:
  - 1.1. the “dirty price” (price with accrued interest) is indicated. Price is indicated in percentage of the nominal value.
  - 1.2. the nominal volume of fixed income instruments (number of financial instruments multiplied with nominal value) is indicated;
  - 1.3. the settlement amount is calculated by multiplying the “dirty price” (in percentage) with the nominal value and number of fixed incomes instrument. Settlement amount of the trade shall be rounded to 2 digits after the decimal point, applying the decimal arithmetic rounding rules.
2. Placing orders or registering a transaction with fixed income instruments in the fixed income automatch market segment (the order book is linked to market segment **RSE Bonds Automatch**), the principles to be followed are:
  - 2.1. In orders or trade registrations placed in the Order Book:
    - 2.1.1. “clean price” (price excluding accrued interest, price is indicated in percentage of the nominal value) is indicated for all fixed income securities, except for Latvian Government securities.
    - 2.1.2. yield to maturity is indicated for Latvian Government securities (also for short-term debt securities).

Note: Besides “clean price” there is a possibility for some fixed income instruments to show also the corresponding yield to maturity wich is used for information purposes only.

  - 2.2. Automatch functions in the market: orders are automatically matched according to the indicated yield for Latvian government securities and according to the “clean price” for other fixed income instruments.
  - 2.3. For fixed income financial instruments the nominal amount (number of financial instruments multiplied with nominal value) is entered in the orders.
  - 2.4. The settlement amount of trades executed with fixed income instruments is calculated by multiplying the “dirty price” (in percentage) with the indicated nominal volume. Settlement amount of the trade shall be rounded to 2 digits after the decimal point, applying the decimal arithmetic rounding rules.
  - 2.5. Accrued interest is rounded to 6 digits after the decimal point.
3. The settlement amount of trades executed with equity instruments is calculated by multiplying the price with the number of instruments indicated in the trade. Settlement amount of the trade shall be rounded to 2 digits after the decimal point, applying the decimal arithmetic rounding rules.

**RULES ON THE PROCEDURES FOR INITIAL PLACEMENT AND BUYBACKS OF LATVIAN  
GOVERNMENT SECURITIES IN THE TRADING SYSTEM OF Nasdaq Riga**

“Rules on the procedures for initial placement and buybacks of Latvian government securities in the trading system of Nasdaq Riga” (hereinafter – rules) establish the procedures for initial placement of Latvian government securities – bills and bonds (hereinafter also – securities) in competitive multi-price auctions, fixed-rate (non-competitive) auctions and in tap issues of government securities, and the procedures for buybacks of securities in the trading system of Nasdaq Riga (hereinafter – Exchange). These procedures have been prepared with due respect to the regulations of the Cabinet of Ministers “Regulation on Issuing Government Securities” (hereinafter – Cabinet Regulation) in force. Initial placement of government securities in Latvia is subject to these regulations and other regulatory acts on government securities in force in the Republic of Latvia.

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**1. USED TERMS**

- 1.1. The terms and definitions used herein that are not defined correspond to the terms and definitions used in the Cabinet Regulation.
- 1.2. Member of the Exchange – a legal entity registered in the Republic of Latvia or a foreign legal entity which in according to the Exchange rules obtains the member status of the Exchange
- 1.3. Maximum admissible yield rate – a government security yield rate fixed by the Treasury above which bids submitted to competitive auction at the initial placement are not satisfied.
- 1.4. Minimum admissible yield rate – a government security yield rate fixed by the Treasury below which bids submitted to the Treasury in case of security buybacks are not satisfied.
- 1.5. Nominal amount – the total sum of nominal amounts of securities which is divided by the nominal value of a securities series without remainder.
- 1.6. Minimum amount of purchase – minimum nominal amount set by the Treasury which an auction participant can submit at an auction and which cannot be divided.
- 1.7. Transaction – a transaction performed with securities in a competitive multi-price auction or a fixed-rate (non-competitive) auction and tap issues of securities, as well as buying back or redeeming securities before the maturity, which is made or registered in the trading system of the Exchange according to the procedures set by the Exchange.
- 1.8. ISIN code – an internationally recognized identification number of financial instruments (International Securities Identification Number), allocated for any total of replaceable financial instruments – financial instruments of identical characteristics issued by the same issuer.
- 1.9. Primary Dealer – Member of the Exchange that has signed agreement with the Treasury on participation in initial placement and buyback of securities.

**2. GENERAL PROVISIONS**

- 2.1. Securities are issued by the Republic of Latvia, represented by the Minister of Finance, and their initial placement and buyback is carried out by the Treasury. Initial placement and buyback of securities with mediation of the Exchange is carried out, using the trading system of the Exchange in accordance with these rules and the agreement concluded between the Treasury and the Exchange. The dates of initial placement,

buyback and settlement of the securities and the characteristics of security series shall be set in separate instructions of the Treasury.

- 2.2. Primary Dealers have rights to participate in the initial placement and buyback of securities according to the signed agreement with the Treasury, unless instruction from the Treasury specifies that all Members of the Exchange have rights to participate.
- 2.3. If all Members of the Exchange shall have rights to participate in the initial placement or buyback of securities, The Treasury shall send the respective information no later than four business days, or in cases, when the Treasury is unable to meet previously set deadline taking into account extraordinary circumstances, no later than at 10:00 at the previous business day prior to the initial placement or buyback of securities.
- 2.4. Within the framework of initial placement and buybacks of securities, the Exchange shall carry out the following functions:
  - 2.4.1. ensure information technologies required for the process of initial placement and buyback;
  - 2.4.2. electronically ensure to members of the Exchange and, upon receiving a respective request, send to the Treasury information about the results of the initial placement and buyback of securities and ensure availability of the information on the Exchange homepage.
  - 2.4.3. submit to LCD for execution settlement orders on transactions with securities on initial placement or buyback of securities;
  - 2.4.4. perform other functions envisaged in agreements concluded between the Treasury and the Exchange on co-operation on initial placement and buyback of securities;
  - 2.4.5. ensure that the Member has access, via Trading system to the information on the transactions executed during the respective auction or buyback, except the information about the transaction parties. Irrespective of the above, Member is able to identify own transactions in the Trading system;
  - 2.4.6. ensure that the list of Primary Dealers is available on the Exchange homepage.
- 2.5. The Treasury shall confirm the results of the initial placement and buyback of securities, examine claims and other cases and make other decisions in the course of initial placement and buyback of securities.
- 2.6. Settlements on transactions with securities in cases of initial placement and buybacks of securities and when acting according to provisions on financial instruments applying to securities shall be performed according to Latvian Central Depository Regulation No 13 „On Financial Operations with Latvian Government Securities”.
- 2.7. Members of the Exchange shall pay a commission fee once a month for participation in initial placement and buyback of securities according the fees set forth by the Exchange. Members of the Exchange shall pay the invoices within the time stated on the invoices of the Exchange.

### 3. INITIAL PLACEMENT OF SECURITIES IN A COMPETITIVE AUCTION

- 3.1. Placement of securities in a competitive auction shall be carried out in accordance with an instruction from the Treasury. One or more competitive auctions can take place on the same day. Competitive auctions are closed, unless the instructions from the Treasury indicate otherwise.
- 3.2. The nominal amount which has not been sold on a competitive auction can be repeatedly auctioned at a competitive auction or sold in tap issues, the amount of series of securities in circulation can be increased on an additional auction or through tap issues.
- 3.3. The Treasury shall electronically send to the Exchange a respective instruction about issue of securities, indicating the information specified in the Cabinet Regulation that has to be included into the instruction regarding the issuance of government securities and date and the time of start and set time till which bids are accepted for each competitive auction, and, if necessary, other information. The Treasury shall send the information mentioned in this paragraph no later than four business days, or in cases, when the Treasury is unable to meet previously set deadline taking into account extraordinary circumstances, no later than at 10:00 at the previous business day prior to each competitive auction. At the same time the Treasury shall ensure availability of the indicated information on the homepage of the Treasury.

- 3.4. Upon the receipt of the Treasury instruction indicated under section 3.3, the Exchange shall immediately forward the information to members of the Exchange in electronic format and ensure availability of the information on the Exchange homepage.
- 3.5. A competitive auction shall take place should at least one member of the Exchange that has rights to participate in the auction has applied for it.
- 3.6. To participate in a competitive auction, a member of the Exchange that has rights to participate in the auction shall submit at least one bid to the trading system of the Exchange on the date of the competitive auction by the time set by the Treasury. All bids submitted to the competitive auction can be modified or cancelled before the time set by the Treasury.
- 3.7. A member of the Exchange that has rights to participate in the auction shall take part on a competitive auction with one or several bids, indicating the nominal amount to be purchased for each bid and the respective corresponding yield rate of the security. The yield rate increment in the bid shall be 0.001 of one percent.
- 3.8. Bids of a competitive auction shall be satisfied starting from the lowest offered yield rate within the margins of the amount of securities issue fixed by the Treasury and the maximum admissible yield rate.
- 3.9. In cases where it is impossible to fully satisfy the bid of the competitive auction, it shall be satisfied within the range of the unauctioned nominal amount.
- 3.10. In case if there are several competitive auction bids with equal yield rates which cannot be fully satisfied, they will be satisfied in proportion to the nominal amount indicated in the bid, taking into account the amount of issue of securities and the minimum amount of purchase. Should nominal amount of securities remain unallocated after this process, it shall be allocated to the bid that has indicated the largest nominal amount of securities. In case if an identical nominal amount of securities has been indicated in two or more bids, the remaining nominal amount shall be allocated to one of these bids, according to principle of randomness generated by the trading system of the Exchange.
- 3.11. Over the course of the competitive auction the Exchange shall prepare a summary of results of the auction and ensure its availability on the homepage of the Exchange by the end of the day of competitive auction, and send it to the Treasury on receipt of a separate request from the Treasury.

#### 4. INITIAL PLACEMENT OF SECURITIES IN A NON-COMPETITIVE AUCTION

- 4.1. Placement of securities in a non-competitive auction shall be carried out in accordance with instructions from the Treasury. One or more non-competitive auctions can take place in one day. Non-competitive auctions shall be closed, unless the instructions from the Treasury state otherwise.
- 4.2. The Treasury shall electronically send to the Exchange a respective instruction about issue of securities, indicating the information specified in the Cabinet Regulation that has to be included into the instruction regarding the issuance of government securities and the date and time of start and set time till which bids are accepted for each non-competitive auction and, if necessary, providing other information. The Treasury shall send the information mentioned in this paragraph no later than four business days, or in cases, when the Treasury is unable to meet previously set deadline taking into account extraordinary circumstances, no later than at 10:00 at the previous business day prior to each competitive auction. The Treasury shall at the same time ensure availability of the indicated information on the Treasury homepage.
- 4.3. Upon receipt of the Treasury instructions indicated under section 4.2, the Exchange shall immediately forward the indicated information to members of the Exchange in electronic format and ensure availability of the information on the Exchange homepage.
- 4.4. After competitive auction until the start of non-competitive auction the Exchange shall ensure availability of information on the homepage of the Exchange about the yield rate and fixed income rate for the tranche of securities to be auctioned at the non-competitive auction.

- 4.5. A non-competitive auction shall take place if at least one member of the Exchange that has rights to participate in the auction has applied for it.
- 4.6. In order to participate in a non-competitive auction, on the date of a non-competitive auction a member of the Exchange that has rights to participate in the auction shall submit at least one bid to the trading system of the Exchange until the time set by the Treasury. All bids submitted for non-competitive auction can be modified or cancelled before the time set by the Treasury.
- 4.7. A member of the Exchange that has rights to participate in the auction shall participate in a non-competitive auction with one or several bids, indicating on each bid the yield rate fixed by the Treasury and the nominal amount. The total nominal amount of securities contained in an Exchange member's bids shall not exceed the amount of the same tranche of securities offered by the Treasury at the last competitive auction.
- 4.8. In a non-competitive auction bids shall be satisfied in proportion to the nominal amounts of securities indicated in the bid. Should a nominal amount of securities remain unallocated after this process, it shall be allocated to the bid that has indicated the largest nominal amount of securities. In case if an identical nominal amount of securities has been indicated in two or more bids, the remaining nominal amount shall be allocated to one of bids, according to principle of randomness generated by the trading system of the Exchange.
- 4.9. Over the course of a non-competitive auction the Exchange shall prepare a summary of results of the auction and ensure its availability on the homepage of the Exchange by the end of the day of non-competitive auction, and send it to the Treasury on receipt of a separate request from the Treasury.
5. INITIAL PLACEMENT OF SECURITIES AT TAP ISSUES
- 5.1. Placement of securities at tap issues shall be made according to instructions from the Treasury.
- 5.2. The Treasury shall send respective instructions about issue of securities no later than on the date of tap issues of the securities or in case of a new series of securities, no later than one business day before tap issues of the securities by 13.00, send respective instructions on issue of securities to the Exchange, indicating the information specified in the Cabinet Regulation that has to be included into the instruction regarding the issuance of government securities and date and time of start and set time till which bids are accepted and, if necessary, indicate other information,. At the same time the Treasury shall ensure availability of the indicated information on the homepage of the Treasury.
- 5.3. Upon receipt of the Treasury instructions indicated under section 5.2, the Exchange immediately, but not later than until the beginning of tap issue, shall forward electronically that information to the members of the Exchange and ensure availability of the information on the homepage of the Exchange.
- 5.4. In order to participate in tap issues of the securities, member of the Exchange that has rights to participate in the tap issue shall submit to the Exchange trading system a bid for purchase of securities. All bids submitted for tap issues are irrevocable and unchangeable.
- 5.5. Members of the Exchange that have rights to participate in the tap issue shall take part in tap issues with one or several bids, indicating yield specified by The Treasury and nominal amount.
- 5.6. The bids on tap issues of securities submitted by members of the Exchange shall be executed in the rank of their submission, taking into account minimum amounts of purchase.
- 5.7. After execution of bids for tap issues of securities the Exchange shall prepare a summary of results of the tap issues and ensure its availability on the homepage of the Exchange by the end of the day of tap issue, and send it to the Treasury on receipt of a separate request from the Treasury.

## 6. BUYBACKS OF SECURITIES

- 6.1. Full or partial buybacks of unencumbered series of securities shall be carried out in accordance with the instructions of the Treasury. Buybacks of securities can be made by using competitive multi-price auctions, fixed-rate (non-competitive) auctions or methods of direct buyback. The Treasury performs full or partial redemption of the series of securities only for securities that are bought back.
- 6.2. The Treasury shall electronically send appropriate instructions about buybacks of securities to the Exchange, indicating the date and time of start and set time till which bids are accepted for buybacks of securities, the ISIN code of the securities, their nominal value, amount of buyback, the date of settlement, and, if necessary, other information no later than ten days before buyback of securities in a competitive multi-price or non-competitive auction or no later than a business day before the date of buyback in case of method of direct buyback. At the same time the Treasury shall ensure availability of the indicated information on the homepage of the Treasury. The Exchange shall ensure further distribution of the information about buybacks pursuant to the provisions of sections 3, 4 and 5 of the rules.
- 6.3. Carrying out buyback of securities, a member of the Exchange that has rights to participate in the buyback of securities shall submit to the Exchange trading system at least one bid for buybacks of securities by the deadline set by the Treasury.
- 6.4. In case of a competitive multi-price auction a member of the Exchange that has rights to participate in the buyback of securities shall indicate in each bid the securities to be sold and the nominal amount as well as the offered yield rate. The yield rate increment on the security offered in the bid shall be 0.001 of one percent. Bids submitted to the competitive multi-price auction can be modified or cancelled before the time set by the Treasury.
- 6.5. In case of a non-competitive auction a member of the Exchange that has rights to participate in the buyback of securities shall indicate on each bid the securities, the yield rate fixed by the Treasury and the nominal amount. The total nominal amount of securities contained in an Exchange member's bids shall not exceed the total nominal amount of securities offered by the Treasury at the respective non-competitive auction. All bids submitted for non-competitive auction can be modified or cancelled before the time set by the Treasury.
- 6.6. In case of direct buybacks of securities a member of the Exchange that has rights to participate in the buyback of securities shall indicate the securities, the yield rate rate or price fixed by the Treasury and the nominal amount. The bids submitted for direct buybacks are irrevocable and unchangeable.
- 6.7. In a competitive multi-price auction the bids shall be satisfied starting from the highest offered yield rate within the amount of buyback of securities set by the Treasury. The Treasury shall have the right to set the minimum admissible yield rate of securities buybacks. In case of several bids for competitive multi-price competition with identical yield rates which cannot be fully met, these shall be satisfied in proportion to the nominal amount indicated in the bid, taking into account the amount of issue of securities and the minimum amount of buyback. Should a nominal amount of securities remain not bought back after this process, this amount shall be bought back from the member of the Exchange that participates in the buyback with the largest nominal amount of securities indicated on the bid. In case if an identical nominal amount of securities has been indicated in two or more bids, the remaining of nominal amounts of securities shall be bought back from one of these bids, according to principle of randomness generated by the trading system of the Exchange.
- 6.8. In a non-competitive auction bids shall be satisfied in proportion to the nominal amount of securities indicated in the bid. Should a nominal amount of securities remain unallocated after this process, it shall be allocated to the bid that has indicated the largest nominal amount of securities. In case if an identical nominal amount of securities has been indicated in two or more bids, the remaining nominal amount shall be allocated to one of bids, according to principle of randomness generated by the trading system of the Exchange.
- 6.9. Bids submitted for direct buybacks of securities shall be satisfied in the order of submission.

## 7. LIABILITES FOR FAILURE TO PERFORM ON OBLIGATIONS

- 7.1. Should a member of the Exchange fail to secure a sufficient amount of funds (in case of initial placement of securities) or fail to ensure the necessary amount of securities (in case of buyback of securities), the Exchange according to the information provided in the request from the Treasury shall charge the member of Exchange with a penalty of EUR 100 and 0.5 % of the nominal amount of securities in the transaction. The member of the Exchange shall pay up the penalties to the Exchange within 10 days after receipt of a respective invoice from the Exchange by transfer of funds to the Exchange account indicated on the invoice. After receipt of the invoice the Exchange shall transfer the received funds to the Treasury in accordance to agreements concluded between the Treasury and the Exchange on co-operation on initial placement of securities and buyback of securities.
- 7.2. The member of the Exchange shall pay a penalty in the amount of 0.5 % from the outstanding amount per delayed day in case the payment of the commission fee under section 2.7 is not made on time. Payment of the penalty will not liberate the member of the Exchange from the obligation to perform its obligations.

## 8. CALCULATION OF SECURITIES PRICE, ACCRUED INTEREST, FIXED INCOME RATE AND YIELD RATE

- 8.1. The annual basis for the calculation of the price and fixed income of Treasury bills shall be Act/360 (the actual number of days is used in the calculation, using 360 days as the basis), but for the calculation of the price, accrued interest, fixed income and yield of bonds it shall be Act/Act (the actual number of days is used in the calculation, with the actual number of days in a year used as the basis), using the standard of the International Capital Market Association (ICMA).
- 8.2. The following conditions shall be taken into account when calculating the price, yield rate, accrued interest, and fixed income rate for T-bonds:
- 8.2.1. The accrued interest is calculated up to six decimals.
- 8.2.2. The price in percentage of the nominal value is calculated up to six decimals.. The settlement amount for transaction is calculated up to two decimals.
- 8.2.3. In case of repeated or additional issue of bonds in circulation the accrued interest shall be added to the price.
- 8.2.4. In case of repeated or additional issue of bonds in circulation the fixed income rate from the first issue of these bonds shall remain without change.

### 8.3 Methods for securities price calculation.

#### 8.3.1. Method for calculation of price for T-bills:

$$P = 100 / (1 + Y * r / 360) \text{ where}$$

P – price of the security;  
Y – yield rate in decimal fractions;  
r – the number of actual days till maturity;

#### 8.3.2. The method for calculation of price for bonds according to the standard of the International Capital Market Association (ICMA) :

Total price of the bond  $K=P+Ac$ , where

$$n \quad CFi$$

$$P = \sum_{i=1}^n \frac{CF_i}{(1 + Y/Fq)^{Li}}, \text{ where}$$

P – bonds price excluding accrued interest (clean price);

n – the number of coupon payments till maturity;

CF<sub>i</sub> – the amount paid at the end of the i-th period;

Y – yield to maturity in decimal fractions;

Fq – number (frequency) of fixed income payments per annum;

Li – the number of fixed-income periods until the date of calculation of the fixed income at the end of the i-th period:

$$Li = t - m / k$$

$$Ac = \frac{100 * Fi * m}{Fq * k}, \text{ where}$$

Ac – accrued interest;

Fi – fixed annual income rate in decimal fractions;

m – the number of the actual days for which the accrued interest is calculated;

k – the actual number of days over the period of coupon where the date of accrued interest calculation falls;

t – number of fixed income payments till the Treasury payment at the end of the i-th period.

#### 8.4 Methods of yield rate calculation for the securities.

##### 8.4.1. For T-bills:

$$Y = \frac{100 - P}{P} * \frac{360}{r}, \text{ where}$$

Y – yield rate in decimal fractions;

P – price of the security

r – the number of actual days till maturity.

8.4.2. The accrued interest shall be calculated from the last date of fixed income settlement date or the date of settlement of the initial issue (including) until the date of settlement of repeated or additional issue of the same bonds (not including).

## 9. FINAL PROVISIONS

9.1. 9.1. These rules and proceeding amendments shall take effect after receiving approval from the Treasury and according to the procedures stated in the Exchange Member Rules.

9.2. These rules shall not be applicable in case of modification of the terms and conditions of government securities (bonds) according to the Cabinet Regulation that makes the applicability of the rules not possible.

### Calculation of average volume weighted price

This Annex describes the methodology for calculation of average volume weighted price for the financial instruments listed on the exchange.

1. Average volume weighted price is calculated by dividing the total trading volume in the respective period with the number of traded financial instruments in the same period, i.e., according to formula:

$$P_v = \frac{\sum_{i=1}^n (P_i \cdot Q_i)}{\sum_{i=1}^n Q_i}, \text{ where:}$$

$P_v$  – average volume weighted price of a financial instrument in the period;

$P_i$  – price of a financial instrument in the trade;

$Q_i$  – number of financial instruments in the trade;

$n$  – number of trades in the same period.

2. The result is rounded to two decimal points.

3. The calculation of average volume weighted price is based on the following trades:

- Before October 31, 2007 - automatically matched trades (*AUTO*) and reported manual trades (*CTNO*) during the trading hours, except for block trades (*CTBL*);
- As of November 1, 2007 – automatically matched trades (*AUTO*) and reported Standard manual trades (*STND*) during the Trading hours, that affect the Last Paid Price.