#### Methodology

# for Setting and Modification of Price Limits for Qualified Investments, for which a Trading Member may submit an Order or sign an Agreement

#### 1. Terms and Definitions

**Dynamic Limits** mean a set of price limits for Qualified Investment prices, for which a Trading Member may submit an Order or sign an Agreement that consists of the upper and the lower limits and defines the price corridor, within which an Order, that is not a Market Order, can be declared or an Agreement can be signed on the basis of a Market Order. If a Trading Member submits an Order, that is not a Market Order, that indicates the Qualified Investment price outside the price corridor, or a Market Order, on the basis of which it is offered to sign an Agreement, condition of which is the price outside the price corridor, an Order, that is not a Market Order, cannot be declared (if the Order indicates Qualified Investment price above the upper limit for Buy Orders; if the Order indicates Qualified Investment price below the lower limit for Sell Orders) and/or on the basis of an Order, that is a Market Order, an Agreement cannot be signed, condition of which is the price outside the price corridor.

**Order** means an offer and/or acceptance of an offer to sign one or more Agreements at Qualified Investment trading held by the Company.

**CC** (Central Counterparty) means International Trading System Limited ("ITS Ltd.") carrying on the Market Activity of Operating a Clearing House as a Central Counterparty based on the license issued by the AFSA.

Company means International Trading System Limited (ITS Ltd.).

**Standard Liquidity Period** means the period of time defined by the Company within a Trading Day for separate Qualified Investments and/or a Group of instruments for the purpose of Dynamic Limit calculation, during which Dynamic Limits are defined in view the restrictions set out in this Methodology.

**High Liquidity Period** means period of time defined by the Company within a Trading Day for separate Qualified Investments and/or a Group of instruments for the purpose of Dynamic Limit calculation, during which Dynamic Limits are defined regardless of the restrictions set out for Standard Liquidity Periods.

**Settlement Quotation** means the value used to calculate Dynamic Limits that is the price defined in accordance with this Methodology.

**Set of Orders** means a set of one or more anonymous Orders declared in the Main Trading Mode and having the same direction and price.

Static Limits means a set of limits for Qualified Investment prices, for which a Trading Member may submit an Order or sign an Agreement that consists of the upper and the lower limits and defines the price corridor, within which an Order, that is not a Market Order, can be declared or an Agreement can be signed on the basis of the Market Order. If a Trading Member submits an Order, that is not a Market Order, that indicates the Qualified Investment price outside the price corridor, or Market Order, on the basis of which it is offered to sign an Agreement, condition of which is the price outside the price corridor, an Order, that is not a Market Order, cannot be declared and/or an Agreement cannot be signed on the basis of an Order, that is a Market Order, condition of which is the price outside the price corridor.

Technical Centre means ITS Tech Limited.

**Price Level** means a part of information associated with Trading progress and results used for Settlement Quotation determination, that includes data on the Set of the Orders, and/or information on the Orders submitted via another trading operator featuring the same direction and price as in the Set of the Orders (if a Set of Orders is available at the time of the Price Level determination) received within the framework of information from another trading operator, if the Company receives the said information.

All terms not defined in this Methodology have the meanings defined in the Business Rules, other documents of the Company, of the Clearing Organisation and/or the Technical Centre, provisions of regulations and rules of Astana International Financial Centre.

## 2. General Provisions

- 2.1. Dynamic Limits restrict the possibility of the following:
- Declaration of Orders, that are not Market Orders, for purchasing with the price above the upper limit, and Orders, that are not Market Orders, for sales with the price below the lower limit (the upper and the lower limits) of the price corridor in the Main Trading Mode;
- Execution by Trading Members, on the basis of Market Orders submitted in the Main Trading Mode, of Agreements, condition of which is the price outside the price corridor.

Thus, the upper Dynamic Limit restricts the maximum price of Buy Order and the maximum price for execution of an agreement regarding Qualified Investments in the Main Trading Mode, the lower Dynamic Limit restricts the minimum price of an sell order and the minimum price for execution of an agreement regarding Qualified Investments in the Main Trading Mode.

2.2. Static Limits restrict the possibility of the following:

- Declaration of the Orders, that are not Market Orders, for purchasing and the Orders, that are not Market Orders, for sales with the price above the upper limit and with the price below the lower limit (the upper and the lower limits) of the price corridor in the Main Trading Mode or the Negotiated Transaction Mode;
- Execution by Trading Members, on the basis of Market Orders submitted in the Main Trading Mode, of Agreements, condition of which is the price outside the price corridor.

Thus, the upper Static Limit restricts the maximum price of an Order and the maximum price for execution of an Agreement regarding Qualified Investments, the lower Static Limit restricts the minimum price of an Order and the minimum price for execution of an Agreement regarding Qualified Investments.

#### 3. Static Limits

- 3.1. Static Limits are set for each Trading Day on the basis of the value of the risk-parameters of Settlement Price (SP) and Qualified Investment Price Fluctuation Limit (L) calculated by the CC in accordance with Methodology for establishing and modifying risk parameters International Trading System Limited disclosed on the web-site of the CC, and remains valid throughout the Trading Day. If SP and/or L values change, Static Limits are recalculated.
  - 3.2. Static Limits are defined as follows:
  - 3.2.1. The Lower Static Limit equals the minimum of the following two values:

$$SP - 2 * L$$
  
 $SP * 0.2$ 

3.2.2. The Upper Static Limit equals the maximum of the following two values:

$$SP + 2 * L$$
  
 $SP * 5$ 

## 4. Dynamic Limits

- 4.1. Dynamic Limits are calculated online during a Trading Day, including the Trading suspension time.
- 4.2. Current values of Dynamic Limits are translated in the Trading System.
- 4.3. Dynamic Limits are defined as follows:
- 4.3.1. The Upper Dynamic Limit equals: Settlement Quotation  $+ \min(0.15 * SP;(UR-LR) *0.1)$
- 4.3.2. The Lower Dynamic Limit equals: Settlement Quotation min(0.15 \* SP;(UR-LR) \* 0.1) where:
- Settlement Quotation means the value defined in accordance with clause 4.4. of this Methodology.
- **UR** means the Upper limit of recalculation of the Risk Assessment Radius for risks regarding Qualified Investments calculated by the CC in accordance with Methodology for establishing and modifying risk parameters International Trading System Limited, as disclosed on the web-site of the CC.
- LR means the Lower limit of recalculation of the Risk Assessment Radius for risks regarding Qualified Investments calculated by the CC in accordance with Methodology for establishing and modifying risk parameters International Trading System Limited, as disclosed on the web-site of the CC.
- **SP** means risk-parameter of Settlement Price calculated by the Clearing Organisation in accordance with Methodology for establishing and modifying risk parameters International Trading System Limited disclosed on the web-site of the CC.
- 4.4. Settlement Quotation is deemed equal to one of the following values, unless otherwise established on the basis of expert assessment of the Company:
- 4.4.1. Price of Agreement, the subject matter of which is Qualified Investments, for which Dynamic Limits are calculated, executed in the Main Trading Mode except for the closing auction period.
- 4.4.2. Price of the best Price Level for purchasing or the best Price Level for sales, subject to simultaneous compliance with the requirements indicated in subclauses 4.4.2.1. and 4.4.2.2.:
- 4.4.2.1. Price of the best Price Level is better than the last Settlement Quotation (the best price means the highest purchasing price and the lowest sales price);
- 4.4.2.2. Price Level remains active (there is at least one declared Order with such Qualified Investments or relevant information on orders submitted via another trading operator is obtained within the framework of information from another trading operator, if the Company receives the said information) during the period of time:

$$BY_n = 5 - B_{n+1}$$

where:

- **Byn** means the period of time, during which the best Price Level at the time of Settlement Quotation calculation by the Company (**Price Level n**) shall remain active for the Settlement Quotation to be declared equal to the price of this Price Level;
- **Bn+1** means time, during which the Price Level existed (**Price Level n+1**) that simultaneously complied with the following requirements:
  - price of this Price Level is better than the price of Price Level n;
  - this Price Level arise before the Price Level n;
  - the period of time, during which this Price Level remained active, is less than 5 seconds.

If at the time of Settlement Quotation determination Price Level n+1 was lacking, Bn+1 is deemed to be zero.

- 4.4.3. Previous value of the Settlement Quotation at the end of the previous Trading Day in the beginning of a Trading Day, if it is impossible to define the value of Settlement Quotation in accordance with subclauses 4.4.1 and 4.4.2. of this Methodology.
- 4.4.4. Settlement Quotation value set on the basis of expert assessment of the Company for Qualified Investments, regarding which information is lacking on agreements executed in the Main Trading Mode except for the closing auction period at trading of the Company, and/or of information on Price Levels during 6 and more months in a row.
- 4.4.5. Risk-parameter of Settlement Price (SP) calculated by the CC in accordance with Methodology for establishing and modifying risk parameters International Trading System Limited, as disclosed on the web-site of the CC- on the first day of Qualified Investment circulation at Trading.
- 4.5. Trading Day consists of one or more Standard Liquidity Periods and one or more High Liquidity Periods. Unless otherwise provisioned by decision of the Company, as disclosed on the Company the web-site, each Trading Day consists of Standard Liquidity Periods and High Liquidity Period indicated in Annex No. 1.
- 4.6. During Standard Liquidity Periods, the upper and lower limits are set for Dynamic Limits. Dynamic Limit values may not exceed the established limits, unless otherwise provisioned by the Company on the basis of expert assessment.
  - 4.7. Dynamic Limits are defined as follows:
  - 4.7.1. The upper limit of Dynamic Limits: LP + min (0.15\*SP; 0.3\*(UR-LR) + 0.02\*SP)
  - 4.7.2. The lower level of Dynamic Limits: LP- min (0.15\*SP; 0.3\*(UR-LR) + 0.02\*SP) where:
- LP means one of the following values, if unless otherwise established on the basis of expert assessment of the Company:
- a) the last value of Settlement Quotation defined at the end of the last High Liquidity Period;
- b) Risk-parameter of Settlement Price (SP) calculated by the CC in accordance with Methodology for establishing and modifying risk parameters International Trading System Limited, as disclosed on the web-site of the CC;
- c) the value set on the basis of expert assessment of the Company for Qualified Investments, regarding which information is lacking on agreements executed in the Main Trading Mode except for the closing auction period at trading of the Company and/or information on Price Levels during 6 and more months in a row.
- **UR** means the Upper limit of the Risk Assessment Radius recalculation for risks regarding Qualified Investments calculated by the Clearing Organisation in accordance with Methodology for establishing and modifying risk parameters International Trading System Limited , as disclosed on the web-site of the CC.
- LR means the Lower limit of the Risk Assessment Radius recalculation for risks regarding Qualified Investments calculated by the CC in accordance with Methodology for establishing and modifying risk parameters International Trading System Limited, as disclosed on the web-site of the CC.
- **SP** means risk-parameter of Settlement Price calculated by the CCin accordance with Methodology for establishing and modifying risk parameters International Trading System Limited disclosed on the web-site of the CC.

# Schedule of Standard Liquidity Periods and High Liquidity Period

Instrument Groups / Qualified Investments	High Liquidity Period	Standard Liquidity Period
	Period of time commencing from the second Sunday of March till the first Saturday of November:	
US Market Securities Instrument Group	From 17:30 Astana time till 01:00 Astana time.	1. From the beginning of the Trading Day till 17:30 Astana time.
		From 01:00 Astana time till the end of the Trading Day.
	Period of time from the first Sunday of November till the second Saturday of March:	
	From 17:30 Astana time till 02:00 Astana time.	1. From the beginning of the Trading Day till 17:30 Astana time.
		From 02:00 Astana time till the end of the Trading Day.
HKEX Market Securities Instrument Group	No.	During the Trading Day in accordance with Trading time, as disclosed on the Company website.
Bonds Instrument Group	No.	During the Trading Day in accordance with Trading time, as disclosed on the Company website.
	Period of time commencing from the second Sunday of March till the first Saturday of November:	
the Qualified Investments included in the US Market Securities Instrument Group and which are exchange-traded funds (ETFs)	From 18:30 Astana time till 01:00 Astana time.	From the beginning of the Trading Day till 18:30 Astana time.
		From 01:00 Astana time till the end of the Trading Day.
	Period of time from the first Sunday of November till the second Saturday of March:	
	From 19:30 Astana time till 02:00 Astana time.	From the beginning of the Trading Day till 19:30 Astana time.
		2. From 02:00 Astana time till the end of the Trading Day.