

Report From the Working Group on Trading Rules (Overview)

- Tokyo Stock Exchange (TSE) has been working to improve its trading rules in order to enhance the convenience and transparency of the cash market, including the introduction of a closing auction session, the extension of trading hours, and optimization of tick sizes.
- In order to assess the effectiveness of these changes and to consider further improvements, TSE established a Working Group (WG) composed of a variety of market stakeholders.
- Within the WG, the policies for improving the closing auction session and the tick size regime was confirmed. Going forward, TSE will proceed with designing the detailed rules.

I. Improving the Closing Auction Session

Evaluation of Current Situation

- **To enhance the transparency and reliability of closing price formation, a closing auction session was introduced in November 2024.**
 - ✓ At present, we have not identified any malicious gaming activities that could undermine the transparency of closing price formation, i.e., order modifications/cancellations just before closing. However, some members did argue that **additional anti-gaming measures are necessary from a prevention perspective.**
 - ✓ It was pointed out that **to enhance the transparency and reliability of closing price formation, further improvements are needed, including the earlier formation of closing prices and preventing sharp fluctuations in quote prices during the pre-closing period.**

II. Further Optimization of Tick Sizes

- In 2014, TSE introduced a framework whereby tick sizes are determined according to index classifications
- In May 2023, tick sizes for medium-liquidity stocks (TOPIX Mid400 constituents) were optimized to reduce execution costs for investors.
 - ✓ **When based on index classifications, the tick size applied is not necessarily appropriate for certain stocks, raising concerns about increased volatility, trading intentions being revealed, and higher execution costs.**
 - ✓ Under the current tick size tables, the ratio of the tick size to the share price (tick weight) varies significantly across price levels, resulting in **a sharp increase in execution costs at price points where the applicable tick size changes.**

Action Plan

- Introduction of random closing¹ to the afternoon close Itayose
- Dissemination of Indicative Equilibrium Prices (IEPs) and Indicative Equilibrium Volumes (IEVs) at pre-closing

Expected Effects:

- ✓ **Earlier closing price formation by bringing forward the timing of order placement**
- ✓ **Curbing volatility and gaming activities**
- ✓ **Enhancing the predictability of closing prices through the expansion of information dissemination**

- Introduction of a framework under which the applicable tick size table is determined based on spread conditions (STR²) per issue, with an annual review.
- Adjustments made across each tick size table to mitigate sharp increases in execution costs at price thresholds where the tick size changes

Expected Effects:

- ✓ For issues for which the tick size is too small for the liquidity level, we will **curb volatility and signaling** by increasing the tick size
- ✓ For issues for which the tick size is too big for the liquidity level, we will **reduce investors' execution costs** by reducing the tick size
- ✓ **Control sharp rises in execution costs that result from price fluctuation**

¹ Random closing is a system where the time of the afternoon close Itayose is randomly determined within a certain period on each business day

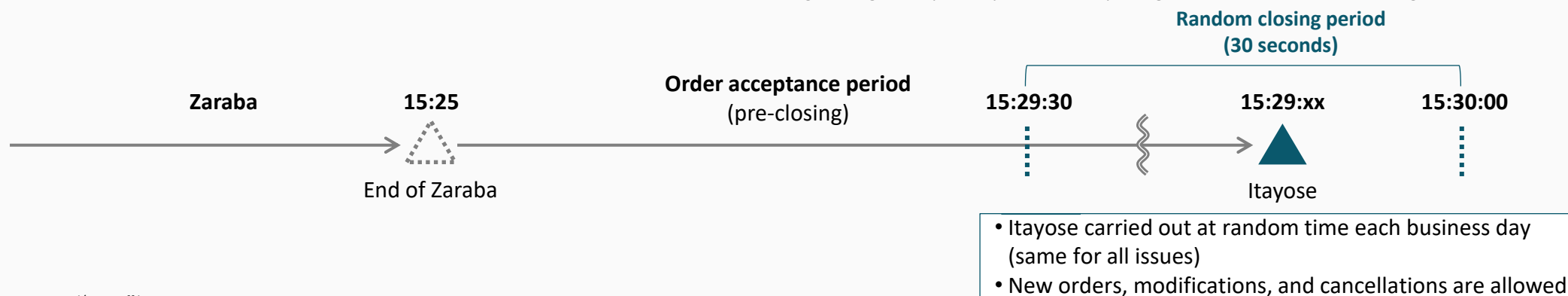
² Spread to Tick Ratio (STR) indicates how many ticks make up the BBO spread by dividing the nominal spread (best ask price minus best bid price) by the tick size. Under MiFID II in the EU, tick sizes are set with reference to the STR.

I. Policy for Improving the Closing Auction Session (Random Closing)

- With a view to further enhancing transparency and reliability in closing price formation, random closing will be introduced to the closing auction session, taking into comprehensive consideration research on overseas markets as well as feedback from domestic and international market stakeholders.
- When introducing new rules, we will communicate carefully to ensure adequate awareness among individual investors and other market stakeholders.

Item	Overview
Random Closing Period	<ul style="list-style-type: none"> • A 30-second period between 15:29:30 and 15:30:00
Timing of the Itayose	<ul style="list-style-type: none"> • The afternoon close Itayose is carried out at a random time within the random closing period (the above 30 seconds) on each business day • The Itayose time is the same for all issues for which a closing auction session is carried out.
Restrictions Based on Order Type	<ul style="list-style-type: none"> • There are no restrictions based on order type, and new orders, modifications of order price and volume, and cancellations are allowed up to the time of the afternoon close Itayose.
Dissemination of Indicative Equilibrium Prices, etc.	<ul style="list-style-type: none"> • We will disseminate Indicative Equilibrium Prices (IEPs) and Indicative Equilibrium Volumes (IEVs) to improve transparency at pre-closing.¹

¹ The same information is also scheduled to be disseminated during a designated period prior to the opening auctions of both the morning and afternoon sessions.



II. Policy for Further Optimization of Tick Sizes (STR)

- Based on the recommendations of the Working Group on Capital Market Regulations and feedback from market stakeholders, we will apply tick size tables based on the STR of each issue.
- Adjustments will be made across each tick size table with a view to leveling tick weights overall, so as to mitigate sharp increases in execution costs resulting from price movements.
- Considering the burden on market participants, the number of tick size tables will be kept from becoming excessive, and the frequency of reviewing the applicable tick size table will be set at once a year, which is the same as in the current rules (at the periodic review of TOPIX constituents)

Overview of the Rules

- STR (Spread to Tick Ratio): Indicates how many ticks make up the BBO spread by dividing the nominal spread (best ask price minus best bid price) by the tick size.
- The below tick size tables will be applied based on the STR.
 - Tick Size Table A ("Active," ultra-high liquidity table)**
 - Tick Size Table B ("Basic," high liquidity table)**
 - Tick Size Table C ("Calm," medium liquidity table)**
- For ETFs and ETNs, Table A will apply as a rule regardless of the STR given their product characteristics and other factors.
- For issues whose trading unit is one share, Table O will apply as a rule.
 - Tick Size Table O ("One Unit," table for issues whose trading unit is one share)**
- The applicable tick size table will be revised every August based on STRs over the evaluation period (nine months from August to April)

STR	Below 1.5	Between 1.5 and 5.0 (inclusive)	Above 5.0
Issues subject to Tick Size Table A	No change (A)	No change (A)	Revised to B
Issues subject to Tick Size Table B	Revised to A	No change (B)	Revised to C
Issues subject to Tick Size Table C	Revised to B	No change (C)	No change (C)

New Tick Size Tables

Stock Price	Current			Post-revisions			
	TOPIX 500 constituents	Other index constituents	ETFs/ETNs with trading unit of 1 share	Tick Size Table A	Tick Size Table B	Tick Size Table C	Tick Size Table O
1 to less than 100	0.1	1	1	0.1	0.1	0.1	1
100 to less than 500						0.5	
500 to less than 1,000						1	
1,000 to less than 2,000	0.5	5	1	0.2	0.5	2	1
2,000 to less than 3,000						5	
3,000 to less than 5,000	1	10	5	0.5	1	5	2
5,000 to less than 10,000						10	
10,000 to less than 20,000	5	50	10	2	5	20	5
20,000 to less than 30,000						50	
30,000 to less than 50,000	10	100	50	5	10	100	10
50,000 to less than 100,000						100	
100,000 to less than 200,000	50	500	100	20	50	200	20
200,000 to less than 300,000						500	
300,000 to less than 500,000	100	1,000	100	50	100	500	50
500,000 to less than 1,000,000						1,000	
1,000,000 to or more	[Omitted]			[Omitted]			

**Tick size is set appropriately
(E.g., STR = 3.0)**

Sell	Stock Price	Buy
100	3,005	
100	3,004	
200	3,003	
400	3,002	
	3,001	
	3,000	
	2,999	400
	2,998	200
	2,997	100
	2,996	100
	2,995	100

Diagram illustrating tick size calculation: A bracket labeled '1' spans from 3,001 to 3,002. A bracket labeled '2' spans from 3,000 to 3,001. A bracket labeled '3' spans from 2,999 to 3,002. A vertical dashed line is shown to the right of the 2,999 price level.

**Tick size is too large
(E.g., STR = 1.0)**

Sell	Stock Price	Buy
400	3,005	
200	3,004	
800	3,003	
500	3,002	
1,000	3,001	
2,000	3,000	
	2,999	2,200
	2,998	1,500
	2,997	400
	2,996	800
	2,995	900

Diagram illustrating tick size calculation: A bracket labeled '1' spans from 2,999 to 3,000.

The order book is crowded and price improvement (e.g., execution at JPY 2,999.5) can be expected.

**Tick size is too small
(E.g., STR = 6.0)**

Sell	Stock Price	Buy
	3,005	
200	3,004	
	3,003	
100	3,002	
	3,001	
	3,000	
	2,999	
	2,998	
	2,997	
	2,996	200
	2,995	

Diagram illustrating tick size calculation: Brackets labeled '1', '2', and '6' indicate price intervals. A vertical ellipsis '...' is shown to the right of the 2,999 price level.

Orders may become fragmented, making it difficult to conduct transactions smoothly, and there is a risk of heightened price volatility.

How to calculate STR
The difference (JPY 3) between the best ask price (JPY 3,002) and the best bid price (JPY 2,999) is 3 ticks (JPY 1). Hence, STR is 3.0.