Contingency Plan with Regard to Trading in the TSE Market

Established on July 19, 1999 Revised on March 16, 2004 Revised on April 1, 2007 Revised on January 15, 2008 Revised on June 16, 2008 Revised on January 4, 2009 Revised on March 24, 2014 Revised on September 24, 2015 Revised on July 3, 2017 <u>Revised on April 26, 2021</u> Tokyo Stock Exchange, Inc.

Tokyo Stock Exchange, Inc. (TSE) hereby sets forth the following contingency plan with regard to trading in the TSE market, in case TSE is unable to continue or considers it inappropriate to continue the trading of securities, etc. in its market due to failures in TSE¹²/₂s trading systems or other related systems. The plan shall be applied when TSE is unable to continue or considers it inappropriate to continue trading in securities, etc. in its market in instances of not only system failures but also other events such as earthquakes, wind/flood damage, terrorist acts, and stoppage of social infrastructure including power/telecommunications networks.

O Basic Policy

As TSE²s role as the central securities market in Japan becomes more and more important, the potential impact at home and abroad of a trading halt in the TSE market grows increasingly larger. TSE will take measures with respect to trading in its market, comprehensively considering the state of the disaster and/or system failure as well as its social roles while paying due attention to such aspects as the balance between securing trading opportunities and forming prices, as ensuring fairness and reliability in price formation in the market is an important function that TSE should provide.

	Possible Situations	Measures to be taken by TSE	Rationale/ <u>Remarks</u>	Regulatory Basis
I.	In the event of a failure in	1. Matching Systems:		• Rule 29, Item 4
	TSE trading systems	• TSE will halt trading of issues for which continued trading is	• It is impossible, as a matter of	of the Business
		difficult.	fact, to execute trades	Regulations, etc.
			manually.	
		2. Order Placement Systems:		• Rule 29, Item 4
		① Stocks and the like		of the Business
		• TSE will consider whether to halt trading of securities	 Failures involving trading 	Regulations, etc.
		tradable through arrowhead, comprehensively taking into	participants that account for	
		account the past market share based on trading value of	market share above a certain	
		trading participants that are unable to participate in trading	level are considered to have a	
		(generally above 50% of overall trading value) and the state	material impact on market	
		of the system failure (including the number of trading	liquidity <u>, and if a diverse range</u>	
		participants, etc. that are unable to participate in trading and	of investors is unable to	
		their attributes).	participate, it is considered that	
		<u>When considering whether to resume trading, TSE will also</u>	the fairness and reliability in	
		take into account the above factors. With regard to decisions	price formation is unlikely to	
		on resuming trading, TSE will make sufficient	be ensured.	
		considerations to ensure fair price formation after trading	• When taking into account the	
		resumes, and will secure order acceptance time and trading	state of the system failure, TSE	
		hours of at least 15 minutes respectively after trading	will consider the attributes of	
		resumes, after issuing a notice on the trading resumption time	investors, including whether	
		to trading participants.	the sum of retail orders	
		• If only specific divisions of a trading participant are unable	brokered by trading	
		to participate in trading due to a failure in individual TSE	participants who are able to	
		systems, the past market share based on trading value of the	participate in trading after the	
		affected trading participant shall be the total trading share of	trading resumption is generally	
		the participant through the numbers of the inter-system	above 30% of trading value by	
		connection virtual servers (hereinafter "virtual server	retail investors, and whether the	
		numbers") that are unable to participate in trading only if the	number of trading participants	
		trading participant declares such virtual server numbers to	brokering retail orders is	
I		TSE in a prescribed form.	generally 5 or more.	

O Concrete Plans (Changes are indicated in red.)

Possible Situations	Measures to be taken by TSE	Rationale/ <u>Remarks</u>	Regulatory Basis
		• In a case where it is deemed	
		inappropriate to make a	
		decision based on the share of	
		trading value and the number	
		of trading participants, TSE	
		will respond flexibly, taking	
		into account the impact of the	
		system failure. (For example,	
		in the case where a system	
		failure has occurred and its	
		impact cannot be foreseen,	
		since trading needs to be halted	
		swiftly, TSE will consider	
		whether to halt trading	
		regardless of the numerical	
		criteria.)	
		• The trading value, etc. by retail	
		investors will be checked based	
		on the data on "Trading by	
		Type of Investors".	
	· However, ToSTNeT trading will continue as long as any	Type of mivestors .	
	trading participant is able to place orders.		
	 ② Convertible bonds (CB) and the like 		
	• After taking into account the past market share based on	• In light of actual trading	
	trading volume of trading participants that are unable to	activities, TSE will halt trading	
	participate in trading, etc., TSE will consider whether to halt	if it deems necessary.	
	trading in securities tradable through arrowhead.		
	• However ToSTNeT trading will continue as long as any		
	trading participant is able to place orders.		
II. In the event of a failure in the	If a failure is likely to distant which formation in the state of the	• If investment continues without	• Rule 29, Item 3
TSE Market Information	• If a failure is likely to distort price formation in the market,		·
system	such as an overall system failure or where normal quote	sufficient dissemination of	of the Business
- ,	information is not distributed, TSE will halt trading.	market information in a	Regulations, etc.
		situation such as where there is	

Possible Situations	Measures to be taken by TSE	Rationale/ <u>Remarks</u>	Regulatory Basis
		a failure in the arrowhead information distribution function, it is considered that price formation in the market is likely to be distorted.	
	• In the event that appropriate price checks cannot be conducted for the auction trading price due to a failure in the information distribution function, TSE will halt only ToSTNeT trading.		
III. In the event of a system failure at the clearing organization or settlement organization(s)	 In the event of a system failure at the clearing organization (Japan Securities Clearing Corporation, Inc. (JSCC)) or the settlement organization(s) (Japan Securities Depository Center, Inc., the Bank of Japan, fund-settlement banks, etc.), the handling of the settlement date, etc. shall be governed by the provisions of JSCC. If it takes several days for the recovery of the systems at the clearing organization or the settlement organization(s), TSE may temporarily halt trading entirely. 	 In order to prevent settlement risk from increasing due to accumulation of unsettled transactions. 	• Rule 4 of the Business Regulations, etc.
IV. In the event of a likelihood of exceeding the processing capacity of TSE's trading systems or the clearing organization's systems	• If there is a likelihood of exceeding the processing capacity of TSE trading systems or the systems used by the clearing organization (JSCC), TSE will halt trading with advance notice.	 It is difficult to continue trading with the processing capacity of each system being exceeded. If there is a likelihood of exceeding arrowhead processing capacity, TSE will halt trading in securities tradable through arrowhead. If there is a likelihood of exceeding the processing capacity of an individual 	• Rule 29, Item 4 of the Business Regulations, etc.

Possible Situations	Measures to be taken by TSE	Rationale/ <u>Remarks</u>	Regulatory Basis
		trading server or the like in	
		arrowhead, TSE will, as a	
		general rule, halt trading in	
		issues processed by the trading	
		server.	
V. In the event of a system	1. Stocks and the like		• Rule 29, Item 3
failure on the side of	• TSE will consider whether to halt trading of securities	 Failures involving trading 	of the Business
trading participants	tradable through arrowhead, comprehensively taking into	participants that account for	Regulations, etc.
	account the past market share based on trading value of	market shares above a certain	
	trading participants that are unable to participate in trading	level are considered to have a	
	(generally above 50% of overall trading value) and the state	material impact on market	
	of the system failure (including the number of trading	liquidity <u>, and if a diverse range</u>	
	participants, etc. that are unable to participate in trading and	of investors is unable to	
	their attributes).	participate, it is considered that	
	<u>When considering whether to resume trading, TSE will also</u>	the fairness and reliability in	
	take into account the above factors. With regard to decisions	price formation is unlikely to	
	on resuming trading, TSE will make sufficient	be ensured.	
	considerations to ensure fair price formation after trading	• When taking into account the	
	resumes, and will secure order acceptance time and trading	state of the system failure, TSE	
	hours of at least 15 minutes respectively after trading	will consider the attributes of	
	resumes, after issuing a notice on the trading resumption time	investors, including whether	
	to the trading participants.	the sum of retail orders	
	• If only specific divisions at a trading participant are unable	brokered by trading	
	to participate in trading due to a failure in the trading	participants who are able to	
	participant's internal system, the past market share based on	participate in trading after the	
	trading value of the affected trading participant shall be the	trading resumption is generally	
	total trading share through the virtual server numbers that	above 30% of trading value by	
	are unable to participate in trading only if the trading	retail investors, and whether	
	participant declares such virtual server numbers to TSE in	the number of trading	
	a prescribed form.	participants brokering retail	
		orders is generally 5 or more.	
		• In a case where it is deemed	
		inappropriate to make a	

Possible Situations	Measures to be taken by TSE	Rationale/ <u>Remarks</u>	Regulatory Basis
Possible Situations	 Measures to be taken by TSE However, ToSTNeT trading will continue as long as any trading participant is able to place orders. Convertible bonds and the like After taking into account the past market share based on trading volume, etc. of trading participants that are unable to participate in trading, TSE will consider whether to halt trading in securities tradable through arrowhead. However, ToSTNeT trading will continue as long as any trading participant is able to place orders. 	Rationale/Remarks decision based on the share of trading value and the number of trading participants, TSE will respond flexibly, taking into account the impact of the system failure. (For example, in the case where a system failure has occurred and its impact cannot be foreseen, since trading needs to be halted swiftly, TSE will consider whether to halt trading regardless of the numerical criteria.) • The trading value, etc. by retail investors will be checked based on the data on "Trading by Type of Investors". • In light of actual trading if it deems necessary.	Regulatory Basis

Possible Situations	Measures to be taken by TSE	Rationale/ <u>Remarks</u>	Regulatory Basis
VI. In the event of an	1. When TSE is unable to monitor trading in securities, etc.		• Rule 29, Item 3
earthquake, wind/flood	• If TSE concludes that it is difficult to continue operations and		of the Business
damage, terrorist act, failure in social	is unable to monitor trading in securities, etc. sufficiently in		Regulations, etc.
infrastructure including	the event that employees of TSE are forced to evacuate the		
power/telecommunications	building due to disaster, terrorist act, etc., TSE will halt		
networks, etc.	trading in such securities, etc.		
	2. When trading participants are unable to participate in trading		
	in stocks and convertible bonds, etc.		
	① Stocks and the like		
	•TSE will consider whether to halt trading of securities	• TSE will coordinate with the	
	tradable through arrowhead, comprehensively taking into	relevant authorities and related	
	account the past market share based on trading value of	organizations in order to	
	trading participants that are unable to participate in the	understand the societal demand	
	market (generally _above 50% of overall trading value), the	for trading and the actual	
	state of the disaster or system failure (the number of trading	damage situation before	
	participants, etc. that are unable to participate in trading and	deciding on trading halts and	
	their attributes, the state of the entire financial market, etc.),	resumptions.	
	and its social roles.	• In a case where the Co-Location	
	• When considering whether to resume trading, TSE will also	area cannot be used, TSE will	
	take into account the above factors. With regard to decisions	also take into account the	
	on resuming trading, TSE will make sufficient	trading value from use of the	
	considerations to ensure fair price formation after resuming	Co-Location service when	
	trading, and will secure order acceptance time and trading	making a decision.	
	hours of at least 15 minutes respectively after trading	• When taking into account the	
	resumes, after issuing a notice on the trading resumption time	state of the system failure, TSE	
	to the trading participants.	will consider the attributes of	
	• If only specified divisions of a trading participant are unable	investors, including whether	
	to participate in trading, the past market share based on	the sum of retail orders	
	trading value of the affected trading participant shall be the	brokered by trading	
	total trading share of the participant through the virtual server	participants who are able to	
	numbers that are unable to participate in trading only if the	participate in trading after the	
	trading participant declares such virtual server numbers to	trading resumption is generally	
	TSE in a prescribed form.	above 30% of trading value by	
		retail investors, and whether	

Possible Situations	Measures to be taken by TSE	Rationale/ <u>Remarks</u>	Regulatory Basis
	 However, ToSTNeT trading will continue as long as any trading participant is able to place orders. ② Convertible bonds and the like After taking into account the past market share based on trading volume of trading participants that are unable to participate in trading, etc., TSE will consider whether to halt trading in securities tradable through arrowhead. However, ToSTNeT trading will continue as long as any trading participant is able to place orders. 3. When clearing/settlement is impossible at the clearing organization or settlement organization(s) In the event of a system failure at the clearing organization (JSCC) or the settlement organization(s) (Japan Securities Depository Center, Incorporated, the Bank of Japan, fund-settlement banks, etc.), the handling of the settlement date, etc. shall be governed by the provisions of JSCC. If it will take several days for the recovery of the systems at the clearing organization or the settlement organization(s), TSE may temporarily halt trading entirely. 	 the number of trading participants brokering retail orders is generally 5 or more. The trading value, etc. by retail investors will be checked based on the data on "Trading by Type of Investors". In light of the actual trading activities, TSE will halt trading if it deems necessary. In order to prevent settlement risk from increasing due to the accumulation of unsettled transactions. 	 Rule 4 of the Business Regulations, etc.
VII. When trading is expected to be halted over an extended period of time	• TSE will consider whether to resume trading after comprehensively taking into account the state of recovery from the disaster and/or system failure (the state of the recovery of the affected system, the situation of trading participants, etc. that are unable to participate in trading, the state of the entire financial market, etc.) as well as its social roles.	• TSE will decide after taking into account such aspects as the state of trading participants' responses while paying due attention to securing trading opportunities.	

Possible Situations	Measures to be taken by TSE	Rationale/ <u>Remarks</u>	Regulatory Basis
VIII. When stock indices are miscalculated	• In the event that an underlying stock index for index-linked investment fund beneficiary certificates (ETFs, etc.) is miscalculated and TSE deems that it may have a material impact on investment decisions, TSE will halt trading in such beneficiary certificates (ETFs, etc.) and resume trading after disseminating information regarding the miscalculation.	• Since miscalculation of the underlying index is highly likely to disrupt price formation of ETFs, TSE will halt trading to disseminate the relevant information.	• Rule 29, Item 3 of the Business Regulations, etc.

O System for notices and communications with trading participants

All of the following communication methods that are used in ordinary times and are available at the time will be used:

Simultaneous broadcast fax, the Internet (JPX website), TSE-WAN (Target), etc.

For communications, etc. between TSE and trading participants/Market Information System users, existing methods will be used.

When checking the share of trading value, TSE will contact the persons responsible for securities trading at each trading participant to check whether they are able

to participate in trading. Such checks will, as a general rule, be conducted via TSE-WAN (Target).