

Summary of Public Comments on “Introduction of Market Access Rule, etc.” and Exchanges’ Responses

April 10, 2020

Tokyo Stock Exchange, Inc.

Tokyo Stock Exchange, Inc. and Osaka Exchange, Inc. (hereafter respectively “TSE” and “OSE”, and collectively “Exchanges”) each published a draft outline “Introduction of Market Access Rule, etc.” on January 30, 2020 and broadly sought comments from the public until February 29, 2020. The Exchanges received many comments and deeply appreciate the cooperation from market participants on deliberations on this issue.

The following are a summary of the comments received and responses from the Exchanges.

Item	Summary of Comments	Exchanges’ Responses to the Comments
1	<p>&lt;Requirement for Direct and Exclusive Risk Management Control over Customer Order Restriction and Measures&gt;</p> <ul style="list-style-type: none"> <li>- TSE’s draft outline “Introduction of Market Access Rule, etc.” has the description “Use of a risk check solution provided by an independent third-party vendor, etc.” in the “Remarks” column. However, it is not clear whether such solution includes the risk check functions provided by TSE. Meanwhile OSE’s corresponding description stipulates available risk check functions include those provided by an independent third-party “(e.g., vendor and OSE (TradeGuard))”. Is it correct that “etc.” in “independent third-party vendor, etc.” includes the risk check functions of TSE virtual servers?</li> <li>- Meanwhile, as indicated in “Order Management Guidelines (draft)”,</li> </ul>	<ul style="list-style-type: none"> <li>- The risk management functions available to trading participants will include the risk management functions provided by TSE.</li> <li>- The type of risk management functions trading participants use should be determined in accordance with each trading participant’s approach to risk management. Trading participants can use the risk management functions provided by the Exchanges if they determine that such use is sufficient for their risk management in light of aspects such as customer attributes and forms of trading.</li> <li>- The items that require “direct and exclusive risk management” under</li> </ul>

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	<p>trading participants accepting orders for Low Latency Trading continue to be required to abide by the “Checklist for Trading Participants Accepting Low-Latency Trading Orders”. However, TSE’s risk check functions do not include functions for implementing the communications management required by the checklist. Supposing that “etc.” in “independent third-party vendor, etc.” includes the risk check functions provided by TSE, with a view to preventing cases such as the arrowhead system glitch in October 2018, is it correct that the use of only TSE-provided risk check functions, i.e., sponsored access, is not permitted?</p> <p>- Currently, compared with the risk management items illustrated by the above Checklist, the risk check functions implemented in TSE virtual servers are extremely limited. From the viewpoint of order management systems, trading participants should not use only the risk check functions in TSE virtual servers with respect to Low Latency Trading. We assume TSE concurs on this point and ask for your response.</p>	<p>the Market Access Rule are restrictions and measures related to the order placement management prescribed in the Rules concerning Order Management Systems at Trading Participants (hereafter “Order Management Rules”). As such, they do not include the items regarding communications management required by the checklist submitted by securities companies accepting orders for Low Latency Trading.</p> <p>- However, in light of risks inherent in indirect order management, with respect to risk checks implemented independently by trading participants (including the items required by the above checklist) other than the items specified by the Order Management Rules, the Exchanges of course, expect trading participants to implement appropriate measures, such as order management using hardware located in a place physically separated from their customers.</p>
2	<p>- TSE and OSE each provide risk check solutions for order management. Our company deems the functions of these solutions are insufficient on their own, and as such, these solutions should be used in combination with order management systems provided independently by trading participants. For example, the reasons for our view that the use of only the solutions provided by the Exchanges is insufficient for order</p>	

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	<p>management are as indicated below.</p> <ul style="list-style-type: none"> <li>➤ The solutions provided by the Exchanges do not support the two-tiered order placement restrictions (i.e., soft limit and hard limit) required by the Order Management Rules.</li> <li>➤ The link to each customer is not clear, so this forces us to take a uniform approach towards setting order limits, which results in insufficient order management.</li> </ul> <p>- For the purpose of ensuring that trading participants will implement fair and comprehensive order placement limits, we would like to propose that the Exchanges provide additional supplementary information, guidance, and opportunities for consultation. For example, the Market Access Rule stipulate “trading participants are required to immediately implement measures to prevent such irregular orders from being placed to the Exchanges” and “trading participants must appropriately handle, in their systems, orders that breach the order limits, etc. they specified” as requirements of trading participants. Thus, it seems to imply that the solutions provided by the Exchanges alone are not enough to satisfy the above requirements and that the utilization of order management systems provided independently by trading participants would be absolutely needed. We would like the Exchanges to clarify this issue.</p>	
3	<Requirement for Direct and Exclusive Risk Management Control over Customer Order Restriction and Measures>	

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	<p>i) Currently the TSE provides the [User-designated Hard-limit Setup Request] interface for [Value per Order], [Cumulative Order Value per time interval] and [Cumulative Execution Value per time interval]. If a trading participant has exclusive control over [User-designated Hard-limit Setup Request] interface provided by TSE, will the trading participant have met the requirement to have “direct and exclusive risk management control”?</p> <p>ii) Does the requirement mandate the trading participant to have direct and exclusive control over [Value per Order]?</p> <p>iii) Does the requirement mandate the trading participant to have direct and exclusive control over [Cumulative Order Value per time interval]?</p> <p>iv) Does the requirement mandate the trading participant to have direct and exclusive control over [Cumulative Execution Value per time interval]?</p> <p>v) Does the requirement mandate the trading participant to have direct and exclusive control over any price deviation control?</p> <p>vi) Does the requirement mandate the trading participant to have direct and exclusive control over a frequency message control (e.g. order messages per second, order messages per minute)?</p> <p>vii) Does the requirement mandate the trading participant to have direct and exclusive control over a repetitive (similar) orders control?</p> <p>viii) Does the requirement mandate the trading participant to have direct and exclusive control over an intraday net exposure control?</p> <p>ix) Does the requirement mandate the trading participant to have direct and</p>	<p>- Trading participants can use the risk management functions provided by the Exchanges if such use is considered appropriate taking into account aspects such customer attributes and forms of trading. However, note that the use of risk management functions provided by the Exchanges and independent third-party vendors must be subject to the direct and exclusive control of the trading participant.</p> <p>- Items for which “direct and exclusive control” is required mean restrictions and measures pertaining to order management prescribed by the Order Management Rules. However, in light of risk inherent in indirect order management, the Exchanges of course, expected that, with respect to other risk checks, i.e., those implemented independently by trading participants or regulatory risk checks in accordance with laws and regulations, trading participants will implement appropriate measures, such as order management using hardware located in a place physically separated from their customers.</p> <p>- Direct and exclusive control is required for the methods of restrictions and measures related to order placement management prescribed in the Order Management Rules. Note that the Exchanges do not specify the methods for managing customers' trading systems (including software and hardware).</p>

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	<p>exclusive control over any other control than those stated in ii) thru viii)?</p> <p>x) Does “direct and exclusive risk management control” mean the trading participant has to control the trading software and trading hardware of the client?</p>	
4	<ul style="list-style-type: none"> <li>- We refer to Item 1 stated on page 1 of [Introduction Of Market Access rule_20200130.pdf] and also page 3 of [actionprogram_referencematerial.pdf]; item 1 states the requirement: “trading participants will be required to have. risk management control”.</li> <li>- Does the requirement mandate the trading participant to have direct and exclusive control over any of the following compliance filtering (not risk) controls: <ul style="list-style-type: none"> <li>i) A short sell flag integrity control?</li> <li>ii) An agency/proprietary flag control?</li> <li>iii) Does the requirement mandate the trading participant to have direct and exclusive control over any other compliance filtering controls than those stated in i) and ii)?</li> </ul> </li> </ul>	
5	<p>&lt;Requirement for Direct and Exclusive Risk Management Control over Customer Order Restriction and Measures&gt;</p> <ul style="list-style-type: none"> <li>- We refer to page 4 of [actionprogram_referencematerial.pdf]; the title states “Direct and Exclusive Order Management.” and the comment at the bottom of the page “*Risk solutions provided by independent third</li> </ul>	<ul style="list-style-type: none"> <li>- Trading participants can use the risk management functions provided by the Exchanges if they determine that such use is sufficient for their risk management in light of aspects such as customer attributes and</li> </ul>

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	<p>parties (including the exchange) can be used”.</p> <ul style="list-style-type: none"> <li>- We also refer to the document [System Interface Specifications for arrowhead – Operation (Order/Notice)], section 10.9.1 Basic Description.</li> <li>- If the trading participant has direct and exclusive access to the [User-designated Hard-limit Setup Request] interface, will the trading participant be compliant with the requirement for direct and exclusive control with an independent risk solution?</li> </ul>	<p>forms of trading. If the use of these functions is subject to the direct and exclusive risk management control of the trading participant, the trading participant would be deemed to satisfy the requirements specified by the Order Management Rules.</p>
6	<p>&lt; Requirement to Implement Order Placement Prevention Functions &gt;</p> <ul style="list-style-type: none"> <li>- We refer to Item 2 stated on page 2 of [Introduction Of Market Access rule_20200130.pdf] and also page 3 of [actionprogram_referencematerial.pdf]. Item 2 makes the statement: “due to a situation such as an order placement system malfunction”.</li> <li>i) Erroneous order placement can occur due to malfunction at the network level; does the requirement cover malfunctions at the network level?</li> <li>ii) Erroneous order placement can occur due to malfunction at the session (login of the virtual server) level; does the requirement cover malfunctions at the session level?</li> <li>iii) iii) Erroneous order placement can occur due to malfunction at the order management level; does the requirement cover malfunctions at the order management level?</li> </ul>	<ul style="list-style-type: none"> <li>- The requirement to implement order placement prevention functions require trading participants to implement measures to immediately prevent the placement of orders in the case where an unexpected irregular order has been, or is likely to be, placed. Every trading participant is required to establish operational procedures for matters such as the criteria to trigger the order placement prevention functions and the scope for which such functions will apply in light of aspects such as customer attributes and forms of trading.</li> </ul>
7	<p>&lt; Requirement to Implement Order Placement Prevention Functions &gt;</p> <ul style="list-style-type: none"> <li>- We refer to Item 2 stated on page 2 of [Introduction Of Market Access</li> </ul>	<ul style="list-style-type: none"> <li>- The requirement to implement order placement prevention functions is</li> </ul>

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	<p>rule_20200130.pdf] and also page 3 of [actionprogram_referencematerial.pdf]; item 2 states the requirement “the trading participant must immediately implement measures to prevent the placement of new orders”.</p> <p>i) Does the requirement mandate that measures must be implemented at the network level (e.g. control of the market facing network device)?</p> <p>ii) Does the requirement mandate that measures must be implemented at the session level (e.g. control of the logins for the virtual servers)?</p> <p>iii) Does the requirement mandate that measures must be implemented at the order management level (e.g. control of trading access in the trading system, or control of order flow in the risk control layer)?</p> <p>iv) If the trading participant only implemented the measure of controlling the TSE virtual server administration suspension function (without implementing any network or order management controls), would the trading participant have fully met the requirement to implement measures to prevent placement of new orders?</p>	<p>aimed at the introduction of measures to prevent orders to be placed to the Exchanges during the phase of the order management at trading participants. The Order Management Rules do not require trading participants to implement measures for communication layers, such as virtual server or network disconnection. However, in light of the features of Low Latency Trading, trading participants accepting orders for Low Latency Trading have been required to implement further fine-tuned measures based on "Checklist for Trading Participants Accepting Low-Latency Trading Orders" since November 2018, and such measures must continue to be implemented.</p> <p>- Regardless of the methods to prevent order placement, as long as trading participants have operationally established such methods and are actually preventing order placement to the Exchanges, such trading participants will be deemed to meet the requirements. In the cases you have mentioned, if the placement of orders to the Exchanges is prevented based on measures at the session level, the trading participant will be deemed to satisfy the requirement.</p>
8	<p>&lt; Requirement to Implement Order Placement Prevention Functions &gt;</p> <p>- We refer to Item 2 stated on page 2 of [Introduction Of Market Access rule_20200130.pdf] and also page 3 of [actionprogram_referencematerial.pdf]; item 2 states the requirement “the trading participant must immediately implement measures to</p>	<p>- The order placement prevention functions do not need to be established within Japan. Even if they are established overseas, their use must still be subject to the direct and exclusive management control of the trading participant.</p>

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	<p>prevent the placement of new orders”.</p> <p>i) Some trading participants operate globally with group entities that are located outside of Japan. Does this rule require that the measures for preventing the placement of new orders must be located within Japan?</p> <p>ii) Does the requirement to “prevent placement of new orders..” include non-transaction messages (i.e. messages used for administration purposes rather than trading)?</p>	<p>- The requirement to prevent order placement will only apply to order messages. Note, however, in light of the features of Low Latency Trading, trading participants accepting orders for Low Latency Trading have been required to implement fine-tuned measures based on "Checklist for Trading Participants Accepting Low-Latency Trading Orders" since November 2018, and such measures must continue to be implemented.</p>
9	<p>&lt; Requirement to Implement Order Placement Prevention Functions &gt;</p> <p>- Whether or not an order is an unexpected or irregular one due to a malfunction, etc. of the order placement system should be determined in accordance with the trading participant's own criteria. Is it correct to understand that trading participants will not always be required to conduct the order management indicated as examples in the draft Guidelines?</p> <p>- For the case where trading participants conduct order management in accordance with their own criteria, we would like the Exchanges to indicate examples or guidelines on how the appropriateness of such order management is determined.</p>	<p>- As you understand, each trading participant is required to independently set forth the criteria and apply them in their business operations. The appropriateness of the business operations established by each trading participant will be checked in regular inspections conducted by Japan Exchange Regulation (“JPX-R”), our self-regulatory organization. Criteria for determining appropriateness will vary depending on aspects such as the size, customer attributes, and forms of trading of each trading participant. As such, TSE does not consider it appropriate to set such criteria uniformly.</p>
10	<p>&lt;Prohibition of Order Management Methods That Involve Deliberate Placement of Erroneous Orders, etc.&gt;</p> <p>i) Does the requirement apply only to the placement of erroneous orders, or does the requirement prohibit any action which causes a negative</p>	<p>- The prohibition of order management methods that involve deliberate placement, etc. of erroneous orders is aimed at avoiding stress on the</p>



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	<p>impact to the TSE systems or the market, by taking any action outside of the normal technical operating and design parameters of the TSE systems, or the matching engine logic or TSE process controls?</p> <p>ii) When a trading participant or their customer performs a risk control of a potential transaction and the transaction is rejected by the control, it is possible to create an order or message which utilizes a mechanism that is external to the control to achieve the rejection of the transaction.</p> <p>iii) In the preparatory material provided previously by the TSE, the TSE gave 3 examples of such prohibited mechanisms:</p> <p>a) the network packet is malformed, or..</p> <p>b) the order values/attributes are malformed or designed to trigger internal TSE matching engine controls, or..</p> <p>c) the order is released but then subsequently followed by a cancel order message.</p> <p>- However, there are many other potential ways in which a risk control could be designed to rely upon an external mechanism to affect a rejection of a transaction that failed a risk control check.</p> <p>- Is it allowed to transmit any message/order to the TSE systems which relies upon an external mechanism to affect the rejection of a transaction that fails a risk control?</p>	<p>Exchanges' systems and impact on market stability resulting from such deliberate placement, etc. Whether the requirement is properly complied with or not will be determined in consideration of the above aim, regardless of methods, etc. that involve deliberate placement of erroneous orders.</p> <p>- In light of the above aim, in preparation for the case of accepting orders that breach order restriction thresholds, etc., trading participants are required to establish effective systems and frameworks for order management and control, such as the swift implementation of automatic prevention of the acceptance of such orders and line disconnections.</p>
11	<p>&lt;Others&gt;</p> <p>- "II, 2, (2) Online Trading" of the draft Guidelines stipulates that "if the scope of money and/or securities deposited by each customer is set as</p>	<p>- As you understand, with respect to automated trading, trading participants are deemed to be conducting effective order management</p>

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	<p>the order limit in the order placement systems that are used by the customers then the order management can be considered to be effective". Is automated trading subject to such order management considered to be substantive order management?</p> <ul style="list-style-type: none"> <li>- We request that supplementary notes to specifically define "automated trading" be added to the draft Guidelines. We understand that the draft Guidelines refer to automated trading as orders likely to have a large impact on the market that cannot be prevented by one-shot limits, that is, the cumulative impact from many small sliced orders over a short period of time due to a malfunction in the order placement system.</li> <li>- It is deemed that, for the orders likely to impose a large impact on the market as indicated above, the method and conditions of trading is determined automatically, and that automated trading is one involving placement of such orders via systems. Thus, as it is deemed that trading involving automatic placement of orders via systems based on a given method and conditions specified by the customer has low such likelihood, is it correct that such trading will not fall under the automated trading defined in the Guidelines?</li> </ul>	<p>if such trading is carried out under the order management referred to in "II, 2, (2) Online Trading".</p> <ul style="list-style-type: none"> <li>- The types of trading mentioned in the Guidelines are defined for convenience sake so as to indicate the main points and typical examples of the order management required. As such, regardless of the types of trading specified in the Guidelines, TSE deems that trading participants need to establish appropriate practical order management methods in accordance with aspects such as customer attributes and forms of trading.</li> <li>- Conducting trades using automated order placement functions at the trading participant's system based on methods and conditions specified by the customer is deemed to fall under a type of automated trading, because there is a possibility that unexpected irregular orders may be placed due to a malfunction, etc. at the trading participant's system.</li> </ul>
12	<p>&lt;Others&gt;</p> <ul style="list-style-type: none"> <li>- We strongly support the proposed "Introduction of Market Access Rule, etc", which is going to be implemented via amendments to the "Order Management Guidelines". These guidelines together will prevent some participants from gaining latency advantages by potentially</li> </ul>	<ul style="list-style-type: none"> <li>- We appreciate your valuable comment.</li> </ul>

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	<p>compromising overall market stability, as was seen in the Oct 2018 TSE outage. All brokers are encouraged to abide by the spirit of the guidelines by building their own risk control framework instead of finding a way around it. It will also enable them to proactively add new controls as they become aware of new risks.</p>	
13	<p>&lt;Others&gt;</p> <p><b><u>1. JPX should require participants to submit their Logic to JPX for approval.</u></b></p> <ul style="list-style-type: none"> <li>- In our experience with rules such as MiFID 2 in Europe, rules are sometimes subject to interpretation. Given the incentives described above, it is in the interest of market stability for JPX to have a veto over the Logic that each Participant deploys. (As a reminder, by “Logic” we refer to risk-management rules that are expressed in a form consumable by a non-technical business person, rather than code.)</li> </ul> <p><b><u>2. JPX should require each Participant to validate that its Implementations faithfully implement the Logic that JPX has approved.</u></b></p> <ul style="list-style-type: none"> <li>- A general rule of computing is that what is expressed on paper does not always get translated correctly into technology. This can be due to bugs, misinterpretations, or deliberate attempts to cut corners. The only way to ascertain what logic a given Participant is actually</li> </ul>	<ul style="list-style-type: none"> <li>- Introduction of the Market Access Rule, etc. are aimed at further improving the reliability and safety of the market and improving order management systems at trading participants.</li> <li>- Trading participants will be required to establish effective order management systems in accordance with the revised Order Management Rules and Guidelines.</li> <li>- The status of establishing such order management systems will be checked by JPX-R in its regular inspections.</li> <li>- Note that trading participants accepting orders for Low Latency Trading are required to submit to the Exchanges the "Checklist for Trading Participants Accepting Low-Latency Trading Orders" with respect to the development status of their order management system and communications management system.</li> </ul>

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	<p>applying to customer orders is to subject the Participant's system to all the conditions that the Logic is supposed to handle and to observe the results.</p> <p><b><u>3. JPX should require each Participant to follow industry standards for the latency measurements that they disclose to customers.</u></b></p> <ul style="list-style-type: none"> <li>- This is the best way to ensure that shifting the burden of risk checks onto Participants does not lead to confusion among customers regarding latencies. (Important point: Testing the latency of execution while risk checks are in force requires validating that the checks are actually in force—that is, sending orders that trigger the various risk conditions that need to be handled. Therefore, latency testing subsumes the validation testing of recommendation #2.)</li> </ul> <p><b><u>4. JPX should require participants to obtain independent validation.</u></b></p> <ul style="list-style-type: none"> <li>- While recommendations #2 and #3 above could operate on an honesty basis (self-validation), we believe that requiring independent validation by a third party on a periodic basis (e.g., once per year or following a major Implementation upgrade) would be more effective. Many honest mistakes can happen in testing. A Participant will have a “confirmation bias”—an incentive to accept erroneous results if they are favorable. By contrast, the only incentive of a third party that trades on its reputation will be to obtain accurate results.</li> </ul>	<ul style="list-style-type: none"> <li>- The Exchanges will consider these points when deeming that a trading participant has made arrangements to a certain degree with regard to ensuring the effectiveness of the development of order management systems.</li> </ul>

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	<p><b>5. <u>JPX should require that latency disclosures are public.</u></b></p> <ul style="list-style-type: none"> <li>- Public disclosure would ensure that third-party reports have not been tampered with. It would also provide retail and institutional investors with a powerful new source of information to use in selecting brokers. As brokers respond to the competitive pressures this introduces, it should narrow the retail/institutional gap and increase public perceptions of fairness.</li> </ul>	
14	<p>&lt;Others&gt;</p> <p><b>1. <u>Market Access Rules</u></b></p> <ul style="list-style-type: none"> <li>- We note that the proposed Market Access Rules close the gap in regulations and rules which currently exist between Japan and markets in the United States, Australia, Hong Kong, United Kingdom, and Germany, among others.</li> <li>- The clarity provided by the formal adoption of the proposed Market Access Rules will establish a clear and predictable operating environment thereby achieving a consistent and level playing field that will foster confidence among all types of market participants.</li> </ul> <p><b>2. <u>Enforcement of Rules</u></b></p> <ul style="list-style-type: none"> <li>- We encourage JPX-R, as the self-regulatory arm of JPX, to take an active role as the first line in monitoring and supervision to ensure full compliance with all applicable rules and regulations.</li> </ul>	<ul style="list-style-type: none"> <li>- We appreciate your valuable comment.</li> <li>- Trading participants can use risk management functions provided by the Exchanges or third-party vendors if the trading participants determine the use to be appropriate in light of their approach to the risk management that they set forth in consideration of customer attributes and forms of trading.</li> </ul>

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	<ul style="list-style-type: none"> <li>- We encourage JPX-R to study, maintain awareness of, and manage a validation and certification process for, the specific Risk Management Tools and methods offered for use on the exchanges, whether provided by trading participants or by third parties (including OSE and TSE).</li> </ul> <p><b>3. <u>Risk Management Functions and Adherence to Rules</u></b></p> <ul style="list-style-type: none"> <li>- Given the criticality of risk management functions to ensure a safe and stable exchange environment, we believe that comprehensive Risk Management Functions that fulfill the TSE and OSE rules and Japanese law should be required and enforced.</li> <li>- We believe providers of Risk Management Tools, whether a trading participant or a third-party, (including the TSE or OSE), must provide written disclosure detailing the specific rules and regulations which are enforced as well as the methodology used to achieve such enforcement.</li> <li>- Such disclosure will ensure complete transparency to all capital markets participants in Japan and thereby foster confidence that a level playing field exists for all participants.</li> <li>- Further, we believe that JPX-R must implement a certification framework to review and validate the above-mentioned disclosures in order to provide independent oversight.</li> <li>- Such activity is consistent with the JPX's role as a self-regulatory organization.</li> </ul>	

Comments No.1 from Goldman Sachs Japan Co., Ltd.; No. 2 from Morgan Stanley MUFG Securities Co., Ltd.; No. 3, 4, 5, 6, 7, 8 & 10 from Societe Generale Securities Japan; No. 9 & 11 from Monex, Inc.; No. 12 from Barclays Securities Japan Limited; No. 13 from STAC (the Securities Technology Analysis Center, LLC) ; No. 14

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from Shiroyama Consulting Co., Ltd.

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