# Measures for stable business operations

### Where we stand

In the wake of the series of IT system failures, we embarked on various types of initiatives to improve our operations. We are steadily continuing these initiatives, checking that they are effective, and ensuring that they become further established in the workplace. We will continue with our initiatives to maintain effectiveness.

#### End of FY2022

## Formation and implementation of initiatives

### **Maintenance**

### Continuation

Establishment in the workplace

- As well as consistently preventing large-scale system failures, we have also firmly established timely initial responses and other initiatives for responding to system failures.
- Moving forward, we will continue to persistently carry forward the lessons from the IT system failures, increase organizational knowledge on each initiative, and balance effectiveness and efficiency. In doing so, we will continue our robust initiatives.

## **Preventing IT system failures**

At Mizuho, having reflected on the series of IT system failures, we have been making even greater efforts to ensure stable operations. These efforts include conducting inspections aimed at preventing further system failures and enhancing our ability to respond in the event of a system failure.

The series of initiatives has been carried out as planned, and the initiatives are already solidly demonstrating their effectiveness in contributing to stable business operations. We will continue to implement such initiatives so that customers can use our services with peace of mind.

In order for us to maintain stable systems and operational frameworks far into the future, we need to upgrade and optimize the development, application, and maintenance of these systems and frameworks by making use of external services and new technology, based on factors such as changes in the business environment, technological trends, and changes in the level of system usage.

Mizuho, as a whole, will continually conduct qualitative reforms and raise the caliber of our operations from a 5- and 10-year perspective. We will achieve this through IT reform initiatives which will transform and optimize operations in need of review, in response to factors such as changes in the business environment. These qualitative reforms and other efforts will allow us to meet changing customer needs and provide safe and highly convenient services.



| System maintenance                    |                              |  |   |  |  |
|---------------------------------------|------------------------------|--|---|--|--|
| Actions taken / Areas for improvement |                              |  | Current status <sup>2</sup>   |  |  |
|                                       | System failures <sup>1</sup> | -  | No. of failures: 2<br>(Feb 28, 2021 – Mar 31, 2022:<br>11 failures) |  |  |
|                                       | Hardware-<br>related         | Complete inspections 380 additional preventive replacements <sup>3</sup> Completed for all 95 systems <sup>4</sup> | No. of failures: 1<br>(Feb 28, 2021 – Mar 31, 2022:<br>5 failures)  |  |  |
|                                       | Software-<br>related         | Strengthened system release<br>check structure<br>Checked for knock-on effects<br>among systems                    | No. of failures: 0<br>(Feb 28, 2021 – Mar 31, 2022:<br>2 failures)  |  |  |
|                                       | Performance-<br>related      | System resources<br>enhancement and<br>monitoring improvement  | No. of failures: 1<br>(Feb 28, 2021 – Mar 31, 2022:<br>2 failures)  |  |  |

- 1. System failures with significant impact (only impact in Japan, excluding externally caused system failures)
- 2. Actual results from Apr 2022 to Mar 2023
- 3. Preventive replacement of disks and other parts, based on signs detected during inspection
- 4. Inspection for finding problems with or room for improvement in system behavior at the time of switching to a backup in the event of a system failure

#### IT governance Current status<sup>2</sup> Actions taken / Areas for improvement Firmly establish personnel management Understanding Established the improvement the frontline cycle by listening to employees and reflecting Improvements in employee situation / their real opinions awareness Personnel Interviews with 1,500 employees - Improvement in frontline management 60 dialogue sessions between executive perception of middle management and frontline employees management - Response rate on the staff Securing necessary Resource survey for IT employees management resources, regarding their experiences at allocation such as IT investments and expenses the frontlines increased to about 80% Risk Enhancement of system failure analysis management

## **System failures: Response enhancement**

Moving forward, we will continue to reinforce the frontlines through visualizing system and operational flows and through increasing organizational knowledge about the lessons learned. At the same time, we will continue to review our operations and system specifications as part of maintaining stable business operations.

| Improving initial response time  |  |   |
|--|--|---|
|  | Actions taken / Areas for improvement  | Current status <sup>1</sup>   |
| Preliminary report<br>of system failures<br>being detected                             |  | Generally within 30 minutes<br>(Target range: within 1 hour)                                  |
| External<br>announcement   | Rigorous initial response<br>operations<br>No. of drills using actual<br>equipment<br>411  | Most recently within 1 hour   |
| System recovery  | Visualization of systems<br>and operations<br>Main 30 operations / second<br>round started | No. of cases taking more than<br>3 hours: 0<br>(Feb 28, 2021 – Mar 31, 2022:<br>10 incidents) |
| No. of transactions<br>processed the next<br>day due to system<br>failure <sup>3</sup> |  | 2<br>(Feb 28, 2021 – Mar 31, 2022:<br>7 incidents)  |

| ATM system failure response          |   |  |  |  |
|--------------------------------------|---|--|--|--|
|                                      | Actions taken / Areas for improvement   | Current status <sup>1</sup>                                |  |  |
| No. of ATMs out<br>of service        | Improvement of ATM functionality Installation of cameras with speakers at all ATM sites | <b>29 units at most</b> <sup>2</sup> (Feb 28, 2021: 4,318) |  |  |
| No. of bankbook<br>and card captures | Improvement of specifications for capturing of bankbooks and cards                      | <b>0 cases</b><br>(Feb 28, 2021: 5,244)                    |  |  |

- 1. Actual results from Apr 2022 to Mar 2023
- 2. Feb 2, 2023: Impact of external line network failure; restored within 46 minutes after the line switchover
- 3. No. of domestic system failures that resulted in transactions that should have been processed on the current day but that were processed in part on the following day, including transactions in progress, etc. No. of affected transactions decreased from several thousand to less than 100.

#### Governance

#### Legal compliance

Establishment of procedures/structures related to foreign exchange laws and regulations; multilayered initiatives to promote/ensure the cultivation of essential understanding among employees, including messages to employees from executive management, employee workshops, and similar

- Clarifying the basic approach and action guidelines and communicating these to all employees through messages from the Group CEO; division heads and general managers also sending messages in response to the actual situation on the frontlines
- Inspection activities and emergency preparedness drills by the frontlines and Head Office, with study sessions held at departments/branches

Enhancement of the autonomous action structure in place at the frontlines and at Head Office by reviewing training programs based on level of understanding and behavioral changes and by expanding inspections beyond the scope of foreign exchange laws and regulations

### Implementing supervisory functions

Carrying out initiatives aimed at enhancing the effective governance structure of the entire group, such as enhancing the multifaceted information-gathering capabilities of outside directors and the expertise of the Board of Directors

- Close exchange of opinions with the executive management of core group companies and visits and communication with frontline offices, Mizuho Research & Technologies offices, Head Office departments, etc.
- Nominated new outside director candidates, including ones with expertise in technology

Continued improvement activities, including those listed above, based on the evaluation process of the effectiveness of the Board of Directors and for the enhancement of supervisory functions

# **Carrying forward lessons from the system failures**

We have designated February as a month for reexamining the system failures. In February, executive messages are shared with employees and the initiatives listed below are held in order to ensure that lessons from the system failures are carried forward.

#### Self-reflective video training sessions

-Training sessions that discourage complacency and instead encourage employees to always act in the interest of our customers and society (Includes watching a training video and participating in a workplace discussion)

Exhibition room on the theme of the IT system failures

-Exhibition room where employees can learn and think about the past IT system failures and the measures in place to stop them from reoccurring

### Group-wide drills

-Practical system- and operation-wide drills Ensuring effectiveness through unannounced scenario-based system failure response drills

<sup>\*</sup> Corporate Governance Report, Supplementary Principle [4.11.3] https://www.mizuhogroup.com/binaries/content/assets/pdf/mizuhoglobal/who-we-are/governance/governance/g-report/g-report.pdf