## Progress of business improvement plan

April 15, 2022

Mizuho Financial Group Mizuho Bank



## 1. Outline of the Business Improvement Plan

- Complete solutions for the direct cause of IT system failures, the inspection of systems that could cause similar failures, and ATM specification change, all by the end of March.
- ✓ Continue wide-range of advanced inspections by utilizing vendors' knowledge etc. in and after April, in order to minimize potential risks and identify issues to be improved.
- ✓ The specific details of initiatives (1) for the "prevention of system failures" and "enhancement of system failure response capabilities" are explained in the subsequent pages.

Main me	easures f	or improvement	Actions	Progress	
Prevention of system failures	Recurrence prevention	Improvement related to the location of the system failures	Inspect and modify systems regarding the direct causes of IT system failures. (Replace failured hardware modify functions, clarify work procedures, and enhance the checking structure.)	Completed	
	ence ition	Improvement related to similar locations	Inspect and modify systems by expanding the scope to locations where similar events could occur.	Completed	
	Prevention	Inspection of important infrastructure platforms	Inspect and modify important systems to ensure that there is no significant failure risk.	Ongoing in order starting from important systems and equipment	
	ntion	Inspection of applications	Inspect and modify important systems to ensure their stable operation (whether settings are appropriate in light of any increase/decrease of transaction volume, etc.).		
Enhancement of system failure response capabilities	Customer support in which system and business contingency plans are working in conjunction		IT and user departments collaborate and confirm the contingency plans and conduct training, etc., to ensure prompt customer support in the case of system failure.	Ongoing in order starting from important operations	
	ATM specification change and the enhancement of customer support capability		Change specifications to prevent ATM cards and bankbooks from captured, in order not to keep customers waiting in case of trouble, and introduce specifications to display information to customers on statements and other.	Completed	
			Install cameras with speaker in ATM booths to ensure prompt customer support in case of trouble.	The installation will start in April 2022.	
Governance	Business operations based on on- site-feedback from IT departments and appropriate personnel allocation		Visualize the operations and personnel required for the maintenance and operation phases and appropriately allocate the required personnel based on the actual situation of frontline offices.	A framework has been established before March 2022, and operations will be verified to make them regular tasks.	
	Enhancement of IT system risk management		Appropriately comprehend and analyze IT system risks by improving management items and details and promote in-depth discussions on risk awareness and countermeasures at the senior management level.	Management items have been revised before March 2022, and discussions are being promoted in a serial manner.	
	Legal compliance		Develop procedures and structures related to foreign exchange laws and regulations and conduct training for executive officers and employees to further improve overall legal compliance.	Procedures and structures have been developed, and training has been conducted Continuously work to make these taking root	
Personnel and organizations			Improve business operations and communication throughout the organizations and secure the continuousness of measures for improvement mentioned in the business improvement plan.	Ongoing in series throughout the organizations	

## 2. Prevention of IT System Failures

	Inspection of important infrastructure platforms						Inspection of applications				
Objective	Inspect the risk of material failure risk of important systems						Inspection of important systems to ensure their stable operation (Inspect the appropriateness of settings in light of any increase/decrease in the transaction volume, etc.)				
Inspection details	<ol> <li>Maintenance expiration date         <ul> <li>Check the maintenance support expiration dates of system equipment.</li> <li>Clarify the risks related to equipment of which maintenance support has expired and develop policies to address the risks.</li> </ul> </li> <li>Preventive maintenance         <ul> <li>Expand the inspection standards, detect signs of errors, etc., and conduct replacement before a failure occurs or the maintenance support expires (preventive maintenance).</li> </ul> </li> <li>System operation in the case of failure         <ul> <li>Check whether there is no problem or point to be improved in the operation of each equipment and function of the infrastructure platforms in the case of a system failure (backup switching, etc.) and clarify policies to address failures.</li> </ul> </li> </ol>				he	<ol> <li>Re-examination of MINORI services that have not yet been put into use         <ul> <li>Confirm that MINORI transaction services that have not yet been put into use can be properly processed using the latest data.</li> </ul> </li> <li>Limit management/operation volume &amp; processing deadlines         <ul> <li>Comprehend changes in the operation volume and system resource use rates and appropriately control the threshold of the resource use rate and the risk of system processing time exceeding the operation deadlines</li> </ul> </li> <li>Regular inspection based on changes in operations         <ul> <li>User and IT departments shall regularly share the necessity of renewing running systems and the readiness of the contingency plan, etc., based on changes in operations in the future, and shall appropriately control risks.</li> </ul> </li> </ol>					
Systems	Systems that support services/operations that need to be continued even in an emergency such as a disaster and a system failure (109 systems)  MINORI Transaction Market/ external settlement 26 (ATMs, etc.) Settlement 17 14 24					m	Systems that support settlement operations that require the prompt activation of the contingency plan, assuming impact on customers, market transactions, etc.  27 systems that support 30 main operations, including deposits/foreign exchange, ATMs, and market/external settlement, etc.				
Current situation (until the end of March)	Maintenance expiration System operation during preventive maintenance or system failure	Until the end of Inspection com Foreign exchanges BOJ settlemen	pleted	From F Continue as inspect Inspect ap systems in	a regular tion.		not ye use Limit	ces that have et been put into management/ ar inspection	Until the end of March Inspection completed Foreign exchange settlement	From FY22  - Inspect applicable systems in series.	

## 3. Enhancement of System Failure Response Capabilities

	Customer support in which system and business contingency plans are working in conjunction	ATM specification change and the enhancement of customer support capability							
Objective	IT and user departments work in collaboration to ensure prompt customer support in the event of a system failure	Develop functions and structures that enable us to promptly provide information and support to customers, without keeping them waiting, in the event of an ATM system failure, etc.							
Matters to be implemented	<ol> <li>Visualize the system configuration and operation flows and reconfirm the impact of system failures on customers</li> <li>Visualize data and operation flows from systems to service provision to customers, utilizing system configuration diagrams and data maps, etc., and reconfirm the scope and details of the impact of a system failure.</li> <li>Confirm the contingency plan considering service provision deadlines</li> <li>Both IT and user departments understand service provision deadlines and confirm the series of response flow including the deadline of contingency plan activation, etc.</li> <li>Ensure prompt customer support in the event of a failure through the above and via training in collaboration between IT-and user departments</li> </ol>	1. Introduce specifications that do not keep customers waiting  • Change specifications to prevent ATM cards and bankbooks from becoming captured so as not to keep customers waiting in case of trouble.  • Introduce specifications to display information to customers on the ATM screen and in statements.  2. Enhance customer support capabilities in case of trouble  • Install cameras with speaker in ATM booths so as to promptly provide customer support in case of trouble.							
Operations and ATM	Settlement operations that require the prompt activation of the contingency plan, assuming impact on customers and market transactions, etc.  30 main operations including deposits/foreign exchange, ATMs, and market/external settlement	Mizuho Bank ATM (1,820 offices)							
Current situation (until the end of March)	Confirmation of the contingency plan and ensuring customer support  Until the end of March  Foreign exchange settlement Market settlement (foreign currencies)  Perform applicable operations in series.	Introduction of specifications  Cameras with speaker  Until the end of March  Release completed  -  Preparation for installation completed  The installation will start in April 2022 and will be completed in March 2023.							

			Current situation	FY22					EV92
			(until the end of March 2022)	Apr.–Jun.		Jul.–Sep.	OctDec.	Jan.–Mar.	FY23
Prevention of		Maintenance deadline	Inspection completed			Continue as regular inspection			
		Preventive maintenance	MINORI Foreign exchange	Sha	Continue as regular				
	Inspection of			Shared platform (other)					
	important infrastructure platforms		settlement BOJ settlement					Overseas and others	inspection
ntio		Operation when a system failure occurs	Foreign exchange settlement BOJ settlement	MINORI	(deposits/foreign e	cchange, etc.) Modification, etc.		+/	
n of system failures					Transaction chan	nels, market/external infrastructure	settlement, and	Modification, etc.	Continue as
							Overseas	and others	regular inspection
	Inspection of applications	Re-examination of services that have not yet been put into use	Inspection completed						
		Limit management/operation volume & processing deadlines	Foreign exchange settlement	ATN	nestic exchange, Ms, and ernal settlement				
		Regular inspection based on changes in operations				Deposits, domestion market	c/foreign exchan /external settlem		Taxes/public funds, and others
Enhancement of system failure response capabilities	Customer support in which system and operation contingency plans are interlocked		Foreign exchange settlement Market (foreign currencies)	market/externa taxes/public	mestic exchange, TMs, I settlement (JPY), funds, and other ent services		Continue as reg	jular efforts	
	АТМ	Introduction of specifications that do not keep customers waiting	Release completed						
		Installation of cameras with speakers	Preparation for installation completed	Completed	at 632 offices	Expanding inc	rementally	Completed at all 1,820 offices	