

## [“Analysis Report on Financial Institutions’ IT System Failures (Summary)”]

### **(1) Introduction**

As information technology has advanced, financial institutions’ dependence on IT systems has increased further, with system risks becoming diverse. In response to the novel coronavirus (COVID-19) pandemic, telework and teleconferencing for new lifestyles are assumed to expand, increasing network load and network-based electronic payments.

In such situation, an analysis of system failures found that failures at third parties<sup>1</sup> increased from the previous year in line with progress in digitalization. New failures were also seen, including those attributable to the COVID-19 pandemic and those regarding service continuation.

Given such situation, the FSA decided to compile and publish major trends and cases (events, causes and countermeasures) of system troubles, believing that an analysis of system failures would be useful for financial institutions to manage system risks.

### **(2) Outline of analysis of failures**

#### **[Failures regarding new risks accompanying progress in digitalization (including third party risks)]**

At multiple financial institutions, new risks caused failures, including those in which Internet banking was made unavailable due to troubles accompanying updates for universal operating systems for Internet banking and system troubles at Internet connection service providers. In multiple cases, third-party failures regarding settlement services used by multiple financial institutions affected many financial institutions, indicating that the safety of systems for settlement and other services provided by third parties has become more important as more systems have cooperated through networks.

Given the above, it is assumed that financial institutions should continuously utilize various guidelines to implement initiatives to tackle new risks accompanying progress in digitalization, including the revision of contingency plans to take into account the importance and risks of services using new technologies.

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<sup>1</sup> Third parties are entities with which financial institutions have business relations and contracts.

### **[Failures regarding COVID-19 pandemic]**

Wild stock price fluctuations caused by the COVID-19 pandemic have led stock trading volume to rise beyond system capacity, bringing about multiple system failures.

This apparently indicates that capacity planning and surveillance should be enhanced in anticipation of trading volume growth.

### **[Failures involving service continuation]**

In multiple cases, redundant configuration failed to work as designed in response to system failures. In some other cases, defects in standards for switching to standby systems and in procedures and arrangements for recovery from failures caused recovery from failures to take much time.

Given the above situation, it is assumed that financial institutions should secure the effectiveness of redundant configuration, revise contingency plans covering outsourcing destinations in anticipation of COVID-19 and other pandemics, and secure the effectiveness of contingency plans through training.

### **[Failures involving natural disasters]**

Power outages triggered by typhoons caused communications failures in which ATMs were made unavailable. In some of such cases, defects in arrangements for contacts with communications service providers and in response to the interception of e-mail communications to branches forced notifications to customers to be delayed.

Given the above, it is assumed that financial institutions should revise contingency plans regarding communications with communications service providers, alternative means of communications to branches, and notification to customers. They should also check network configurations and consider the diversification of telecommunications carriers to reduce communications failure risks.

## **(3) Future FSA initiatives**

Financial institutions are assumed to refer to this report when developing and upgrading system risk management arrangements according to their respective sizes and characteristics. By they are shared these system failure cases, they are expected to accumulate creative ingenuity for developing and upgrading system risk management arrangements from the viewpoints of financial system safety and customer protection.

The FSA will continuously analyze system failures and make timely attention to financial institutions regarding new risks and cases become apparent.