

## GUIDANCE CONCERNING CONTINGENCY PLANNING IN CONNECTION WITH YEAR 2000 READINESS

**To:** The Board of Directors and Chief Executive Officers of all federally supervised financial institutions, service providers, software vendors, senior management of each FFIEC agency, and all examining personnel

### Background

The Federal Financial Institutions Examination Council (FFIEC) issued an interagency statement May 5, 1997, entitled "Year 2000 Project Management Awareness," that provided guidance for insured financial institutions to manage the phases of their Year 2000 readiness program. Subsequently, the FFIEC issued four statements that provided additional guidance on key issues including business risk, vendor due diligence, customer risk, and testing. Accordingly, financial institutions should be well into their Year 2000 readiness plan. The Awareness and Assessment phases should be completed. The Renovation and Validation Phases are current priorities and should be in process.

Another essential component of preparing for the Year 2000 problem and beyond is developing options for the board of Directors and senior management if any or all of the financial institution's systems fail or cannot be made Year 2000 ready. The interagency statement "Guidance Concerning Institution Due Diligence in Connection with Service Provider and Software Vendor Year 2000 Readiness," issued March 17, 1998, recommended that financial institutions adopt contingency plans for their mission-critical services and products. That issuance also provided guidance for developing contingency plans designed for external providers. The FFIEC has also issued previous guidance on contingency planning.

The guidance provided in this paper is modeled after the United States General Accounting Office exposure draft "Year 2000 Computing Crisis: Business Continuity and Contingency Planning," released in March 1998 (GAO/AIMD-10.1.19 at [www.gao.gov](http://www.gao.gov)).

### Purpose

The purpose of this guidance is to assist the board of Directors and senior management of financial institutions as they refine the Year 2000 contingency plans developed during the assessment phase. A financial institution should design its Year 2000 contingency plan to mitigate the risks associated with (1) the failure to successfully complete renovation, validation, or implementation of its Year 2000 readiness plan (Remediation Contingency Plan), and (2) the failure of systems at critical dates (Business Resumption Contingency Planning). While Remediation Contingency Planning has been addressed in previous FFIEC guidances, the last section of this paper provides clarification of certain aspects of that guidance. The primary subject of this paper, however, is Business Resumption Contingency Planning.

### Summary

The FFIEC recognizes that each financial institution operates with a unique aggregation of technological resources within the confines of a predefined operating structure. Thus, there are no ideal or simple solutions to Year 2000 contingency planning. This policy statement presents guidance and recommendations, but is not intended to be an all-inclusive Year 2000 contingency planning solution. Each financial institution must evaluate its own unique

circumstances and environment to develop a comprehensive plan to ensure its ability to continue as a functioning business entity after January 1, 2000. The board of Directors and senior management should attach a high priority to the development, validation, and implementation of the Year 2000 contingency plan.

To produce a viable Year 2000 business resumption contingency plan in a cost effective manner, each financial institution should evaluate the risks associated with the failure of core business processes. Core business functions or processes of a financial institution are groups of related tasks that must be performed together to ensure that the financial institution continues to be viable. Evaluation of these risks should include comparing the cost, time, and resources needed to implement the contingency alternatives.

## **BUSINESS RESUMPTION CONTINGENCY PLANS**

Financial institutions' boards of Directors and senior management should ensure that their institutions' Year 2000 contingency planning process encompasses a plan of action in the event that there are systems failures at critical dates. The business resumption contingency planning should be incorporated into the institutions' overall Year 2000 contingency plan.

The four phases of the Year 2000 business resumption contingency planning process should include:

1. Establishing Organizational Planning Guidelines that define the business continuity planning strategy;
2. Completing a Business Impact Analysis where the financial institution assesses the potential impact of mission-critical system failures;
3. Developing a Contingency Plan that establishes a timeline for implementation and action, circumstances, and trigger dates for activation; and
4. Designing a method of Validation so that the business resumption contingency plan can be tested for viability.

The phases of the process are more fully discussed below.

Examiners from the FFIEC member agencies will address the Year 2000 business resumption contingency planning process as part of each financial institution's Year 2000 readiness examination.

Attaining Year 2000 readiness is one of the most complex and challenging issues facing a financial institution's board of Directors and senior management. Many financial institutions will expend substantial resources to renovate or replace mission-critical systems, yet despite this effort and commitment, the risk of disruption to business processes remains. A Year 2000 business resumption contingency plan should be designed to provide assurance that the mission-critical functions will continue if one or more systems fail. Furthermore, it should not be viewed as a static document, but as a process that should be reviewed, updated, and validated on a continuous basis.

### **Organizational Planning**

The board of Directors and senior management must be directly involved in the financial institution's Year 2000 business resumption contingency planning process. The production of the contingency plan document may be delegated to staff and implementation decentralized to

segments of the financial institution's operations. Ultimately the board of Directors and senior management are responsible for the overall process and assure that sufficient resources are made available to ensure the success of the Year 2000 business resumption contingency plan.

***Establishment of a continuity project work group and assignment of roles and responsibilities.***

Depending on the size and complexity of the financial institution, this may be an individual; or representatives from all major business segments, including disaster recovery specialists, and audit representatives, if available. This individual or group will develop the continuity plan and later develop and monitor the Year 2000 business resumption contingency plan.

***Identification of core business processes.***

Mission-critical systems were identified during the assessment phase. Core business processes that utilize these mission-critical systems may have also been identified. Beyond the information system relationships, all aspects of the business process should now be defined.

It is important to ensure that key internal and external business dependencies are identified, including infrastructure and information sources. While the financial institution may have only limited control of the impact of these elements on the operations, it is essential that the institution identify these elements in order to establish contingency alternatives.

***Establishment of an event timeline.***

Each financial institution should develop a timeline of events that incorporates the schedule of renovation and testing in the financial institution's Year 2000 readiness plan. The Year 2000 business resumption contingency plan should specifically identify a pre-Year 2000 event timeline as well as a post-Year 2000 event timeline. Critical stages must be identified, assessed for feasibility of implementation, and updated as necessary.

***Development of a risk management process and reporting system.***

Business risks should be prioritized with the business resumption contingency planning efforts focused on the core business processes that, should they be compromised, pose the greatest risk to the institution. Year 2000 readiness risks should be identified and a system developed that provides an adequate means of reporting progress and changes in the Year 2000 readiness plan.

***Review of existing business continuity or contingency plans and disaster recovery programs.***

The financial institution should assess the strengths and weaknesses of these programs to determine their continued effectiveness and to eliminate redundancy and any waste of resources. For example, a financial institution may consider using an existing contract for a hot-site that will process mission-critical information systems in the event of a disaster.

***Business Impact Analysis***

This phase assesses the potential impact of mission-critical system failures on the core business processes. The financial institution should assign priority to the business processes. The results of this analysis provides the basis for the contingency plan.

***Perform a risk analysis of each core business process.***

Issues to be considered may include:

The status of Year 2000 readiness renovation or replacement plans for mission-critical systems, whether administered internally or by service providers; The financial and marketing impact of the loss of a core business process, including what impact the loss might have on the viability of the financial institution; and

The impact of regulatory requirements. *Define and document Year 2000 failure scenarios. Consider the risk of both internal and infrastructure failures.*

The results of tests run on renovated systems may lead to the development of the failure scenarios. For example, an ATM network failure may necessitate increased teller staff to accommodate increased lobby traffic.

*Determine the minimum acceptable level of outputs and services.*

For example, those responsible should establish the minimum frequency for production of demand deposit, savings, and loan trial balances.

### **Year 2000 Business Resumption Contingency Planning**

The financial institution should now develop its Year 2000 business resumption contingency plan based on the priorities established during the business impact analysis. The plan should be documented and organized so that it can be easily changed if necessary.

***Evaluate options and select the most reasonable contingency strategy.***

The strategy should be cost-effective, practical and appropriate for the size, complexity, and type of information systems used. In selecting a strategy, consider the cost and functionality of the strategy and the feasibility of deploying the event timeline. The primary goal should be to maximize the functionality and speed of recovery. Financial institutions serviced by third-parties should develop strategies that take into account the contingency alternatives outlined in those third-party contingency plans.

***Identify contingency plans and implementation modes.***

Develop a specific recovery plan for each core business process that considers the minimum level of acceptable output. Evaluate the need for specific strategies such as quick fixes, partial replacement outsourcing or other alternatives. The plan could include consideration of whether the systems to support the core business processes could be replaced by manual or automated processes.

Document the products of the core business processes that may need to be recovered. Each financial institution should review its Year 2000 readiness plan to determine the key dates that tie to this data. In general, the following items should be included:

Machine-readable copies of the institution's master-files and transaction files;

Printed (or other similar medium such as microfiche) trial balances;

A master list of Year 2000 readiness contact points of every client, supplier, bank, and government agency that shares data with the institution;

Electronic text-format copies of all master files and trial balance reports; and

In those instances where the financial institution's data processing facility is providing services to other financial institutions, a copy of machine-readable data files, for all customers.

Other important review processes to consider include:

Legal counsel reviews of data processing and service providers' contracts where necessary to determine the responsibilities of each of the parties;

Comprehensive review of all of data processing insurance coverage;

Public relations responsibilities that are organized and delegated to specific individuals or committees ensuring that appropriate staff make accurate statements;

Review of all Local Area Network (LAN) and Wide Area Network (WAN) access to other systems; and

Review and testing the financial institution's disaster recovery site to ensure that Year 2000 capable hardware is available if needed.

***Establish trigger dates to activate the contingency plans.***

Those responsible for the plan should continuously evaluate the progress of the Year 2000 readiness plan and report any deviation from the plan to senior management. They should monitor critical milestones and establish trigger dates for implementation of the contingency plans. Those trigger dates should take into account what would be involved in obtaining alternative sources of service.

***Assign responsibility for business resumption of core business processes.***

Either an individual or team should be responsible for managing the implementation of the contingency plan.

***Implement an independent review of the feasibility of the contingency plan.***

Who conducts the review will depend on the size and complexity of the financial institution. The party responsible should be independent of the contingency plan process.

***Develop an implementation strategy for the physical rollover.***

Management should ensure that there are plans in place and staff available for the period December 30, 1999, and January 3, 2000, and the other key milestone dates.

***Validation of the Business Resumption Contingency Plan***

Throughout this document, contingency planning has been referred to as a process. Modifications or corrections to the financial institution's Year 2000 readiness plan may prompt

modifications or corrections to the contingency plan. Periodic tests of the contingency plan will ensure that these changes are considered and that the level of support for the core business processes is adequate. The frequency and sophistication of testing should be consistent with the size and complexity of the financial institution.

Financial institutions should develop and document business resumption contingency test plans approved by senior management. The test plans should be independently validated in order to judge the effectiveness and reasonableness of the proposed contingency plan. This independent validation should be performed by knowledgeable individuals who were not involved in the formulation of the plans. If the financial institution does not have the expertise in-house, they should secure the expertise from other sources. Based on those test results, modifications should be made to ensure that the business continuity plan remains valid.

## **REMEDIATION CONTINGENCY PLANS**

Thus far, guidance in this paper has addressed the planning efforts needed to mitigate the operational risks should systems fail at critical dates. Other key aspects of the broader contingency planning concept have been discussed in previous FFIEC guidance papers related to the Year 2000 computer problem. These aspects included planning that mitigates the risks associated with the failure to successfully complete renovation, validation and implementation of mission-critical systems. This facet of contingency planning is referred to as remediation contingency planning and pertains to mission-critical systems developed in-house, by third party service providers, and by software vendors. The following guidance is intended to clarify supervisory expectations as outlined in the Interagency Statement issued May 5, 1997, "Year 2000 Project Management Awareness."

If a mission-critical application or system has been remediated, tested and implemented, a remediation contingency plan is not required. If internal remediation efforts or vendors are expected to provide Year 2000 ready products and services within a short period of time (no later than July 31, 1998), remediation contingency plans may not be necessary for those systems. However, the financial institution should establish a firm date that would trigger completion of the remediation contingency plan should internal efforts or the efforts of the institution's vendor or servicer fail to provide a Year 2000 ready product or service.

If a system is in the process of remediation, and is on schedule to meet FFIEC timeframes, comprehensive remediation contingency plans may not be necessary. At a minimum, financial institutions should develop remediation contingency plans which (1) outline the alternatives available if remediation efforts are not successful, (2) consider the availability of alternative service providers or software vendors, and (3) establish trigger dates for activating the remediation contingency plan, taking into account the time necessary to convert to alternate service providers or software vendors.

The FFIEC understands that ensuring the availability of an alternative servicer or vendor may require payment of a fee. Whether or not to pay this fee is a business decision that the financial institution board of Directors and senior management must make. The decision should consider the probability of failure of the institution's internal efforts, or the remediation efforts of existing service providers or software vendors. Management should also consider the following:

The extent to which the existing service provider or software vendor has met milestones established by the financial institution;

The amount of time necessary to migrate to an alternate service provider or software vendor;

The availability of alternative service providers or software vendors; and

Any information about the alternate servicer provider or software vendor available from user groups or others.

### **Conclusion**

The FFIEC realizes that the complexity of a financial institution's Year 2000 business resumption contingency plan will vary depending upon the complexity of its information system structure; however, the FFIEC expects financial institutions to develop, implement, and validate Year 2000 contingency plans designed to mitigate the risks associated with the Year 2000 date change. The Year 2000 contingency plan should be in writing and documented to support the conclusions and procedures therein. The board of Directors and senior management are responsible for ensuring that the Year 2000 contingency plan is comprehensive and adapted for the unique attributes of their financial institution.

Footnotes:

1. Any problem which prevents information technology from accurately processing, calculating, comparing, or sequencing date or time data from, into, or between the 20th and 21st centuries; or the years 1999 and 2000, or with regard to leap year calculations.
2. On March 26, 1997, the FFIEC issued a policy statement entitled "Corporate Business Resumption and Contingency Planning." Although not specific to the Year 2000 readiness issue, the statement emphasized the importance of the business resumption and information systems contingency planning functions, including planning for critical information systems and operations supported by service providers. Financial institutions were encouraged to ensure that contingency plans were comprehensive and thoroughly tested. (The paper can be obtained at [/news/news/financial/1997/fil9768.html](http://news/news/financial/1997/fil9768.html) ).