



Global Business Continuity Planning

THE GOLDMAN SACHS BUSINESS CONTINUITY PROGRAM FOR DISASTER RECOVERY: OVERVIEW

Business continuity for disaster recovery is a high priority for Goldman Sachs, its subsidiaries and affiliates. Our goal is to ensure our continued ability to serve our clients and to protect their assets and the people and assets of our firm. Our Business Continuity Program has been developed to provide reasonable assurance of business continuity in the event there are disruptions of normal operations at the firm's critical facilities.

The firm has established a global, structured approach designed to ensure that the firm is prepared should a business disruption occur. This approach addresses business disruptions of varying scope, including, but not limited to: Goldman Sachs-only business disruptions, medium scale and large scale events involving the disruption of business, cyber events and displaced personnel or a significant reduction in our workforce due to illness, injury or death. Our plans include leveraging our global resources and infrastructure through relocating impacted business units to designated and tested business recovery sites, as well as using critical data and applications which are replicated between geographically dispersed data centers. For example, if a local storm were to render one or more of our business units inoperable, we could perform critical functions at another Goldman Sachs office with minimal disruption, and if a problem occurred in one of our data centers, effectively shutting down our servers, we could carry on processing from another Goldman Sachs data center with minimal loss of data.

As part of our regular maintenance, we periodically test systems and processing failover to business recovery sites. Our plans also consider the potential need for our business operations to be supported by staff operating from non-Goldman Sachs locations, including their homes, should an incident occur which requires personnel to be dispersed. Potential scenarios include a biological, chemical or pandemic "event" in or near a location in which the firm does business.

No contingency plan can be failsafe or provide absolute assurance that an interruption in business will not occur or that negative consequences will not ensue from a crisis or event. Because natural and other disruptions — even if anticipated — generally are unpredictable and can change over time, no plan when originally designed or even if later modified can anticipate every contingency or need. That said, Goldman Sachs is committed to ensuring that its program is comprehensive and up-to-date, particularly as new information, techniques, and technologies become available. We may alter, add to, or eliminate specific aspects of the program as we judge appropriate for the protection of all concerned. We will keep both our clients and our own community informed of pertinent changes.

The Goldman Sachs Business Continuity Program

We have a dedicated team of professionals responsible for training and education; for creating and maintaining the program; and for implementing, managing, and monitoring the firm's preparedness. The program, which was developed with the assistance of this team, is comprised of five key elements: Crisis Management, Business Recovery, Systems and Data Recovery, People Recovery Facilities, and Process Improvement.

1. Crisis Management: Coordination, Communication, and Training

Crisis Management encompasses the communication processes and response procedures by which the firm manages a business disruption, as well as the tools, training, and exercises we use to help prepare the firm and our people for possible disruptions. Because the first two hours following a

disruption are often the most critical, the firm has established a multi-pronged, rapid response capability that includes:

- Formal Command Centers in every region of the firm's worldwide operations. The Command Centers allow the firm to monitor its environment, execute preestablished crisis management procedures, and coordinate responses.
- Crisis Management teams identified and trained to support the assessment, escalation, and decision making processes in a business disruption.
- Communication plans with local authorities and regulators to facilitate information flow and coordination of responses.
- Processes and communication tools, including some automated tools, to notify key senior managers and personnel quickly at the onset of a disruption.
- Crisis Response Guidelines distributed to each employee, including senior management, and Crisis Handbooks or playbooks for our most senior managers.

The firm's Crisis Management responses are periodically rehearsed. The firm carries out both desktop drills and live exercises that reinforce these arrangements and allow the firm to study and improve its program and processes.

2. Business Recovery

Business Recovery focuses on protecting client assets and assuring that the firm is able to continue business operations in the event of a business disruption.

Central to the firm's business recovery efforts is a requirement that each Goldman Sachs business unit develop, test, and maintain recovery plans for each of its core functions. As part of these plans, each business unit identifies critical risks and puts in place the appropriate level of business controls and functionality necessary to mitigate those risks. The resultant plans document the functional requirements — equipment, applications, vital records and regulatory reports, relocation sites, and recovery teams and tasks — needed to reestablish essential business operations. The plans also assess the impact of a business disruption on the firm's business constituents, banks, and counterparties.

3. Systems and Data Recovery

Systems and Data Recovery focuses on restoring the firm's core infrastructure, including networking, applications, market-data feeds, and other shared technologies to ensure the continuation of critical business systems processing. Applications are prioritized based on their criticality to the business. Recovery requirements and the frequency of application testing are then established based on those priorities.

Wherever practicable, Goldman Sachs separates the people conducting business from the technology infrastructure supporting the business, housing them in separate buildings, thus reducing the likelihood of simultaneous personnel and systems disruptions. Buildings are prioritized based on their criticality to the business and backup generators are used to protect the most critical facilities.

In addition, offsite data centers have been established away from our primary facilities to support recovery of critical systems and data. Critical data is backed up to alternate locations on a regular basis.

4. People Recovery Facilities

People Recovery Facilities focuses on ensuring that our people can quickly get back to productive work when their physical facilities are not operating or are not accessible.

People Relocation Sites — redundant work environments — have been established for critical business units. These People Relocation Sites, available in all regions, are outfitted with the equipment and functional capabilities required to carry on business in emergency situations. The Relocation Sites are continually maintained to ensure operational readiness and are tested regularly. As a further safeguard, depending on the kind and extent of the disruption, many critical functions can be shifted to other principal offices of Goldman Sachs, including offices around the world.

Additionally, the firm is able to support critical functions by enabling designated staff to work from their homes, or from other non-Goldman Sachs locations through secure remote access connections.

5. Process Improvement: Continual Assessment and Testing

Process Improvement assesses and tests our state of readiness for foreseeable business disruptions, including:

- Ongoing testing of plans.
- Continually reassessing risk — including operational and financial risks — and integrating new risk scenarios into the program.
- Updating business requirements and integrating them into the program.
- Introducing new strategies and technologies as they become available.
- Undertaking periodic review and refinement of the program.

Client Communications and Questions

This document provides an overview of the firm's Business Continuity Program. If you have additional questions, please contact your Goldman Sachs representative. Please bear in mind that we will not respond to specific questions about the program that could compromise our security.

Pertinent updates to this Overview will be available on the Goldman Sachs Web site (<http://www.gs.com>). This Overview can also be obtained via mail by contacting your Goldman Sachs representative.

In the Event of a Business Disruption

Should there be a significant business disruption, clients are encouraged to visit the Goldman Sachs Web site (<http://www.gs.com>) for additional information.

This Overview is designed to satisfy disclosure requirements under FINRA Rule 4370 requiring the creation and maintenance of a Business Continuity Plan.

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