

# OmniMath, Inc.

Management Consultants

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P.O. Box 20440  
Columbus Circle Station  
New York, NY 10023  
(212) 865--5400

## Business Continuity Services Overview

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## **Business Continuity Services – Introduction**

Regulatory agencies, exchanges, insurers and counterparties require that trading firms have in place a business continuity plan to ensure the firm's survival in the event of a natural or man-made crisis. Unregulated firms such as hedge funds are increasingly under pressure to provide these plans as well. Fiduciary responsibilities, Sarbanes-Oxley, the Patriot Act and other legislation make it imperative that adequate safeguards be available for important data, and that the continuance of firm operations be provided for in the event of storm, power or communications failure, health emergency, loss of critical personnel or terrorist activity.

Is your firm prepared to meet these requirements?

Creating, testing and maintaining these plans requires expertise that many such firms do not possess. Hiring major consulting companies to provide that expertise is often beyond the financial capabilities of small and medium-sized trading firms. OmniMath, Inc. provides a cost effective way for your firm to meet its obligation to have an effective business continuity plan in place.

OmniMath has two advantages over other business continuity consultants:

- § With over 25 years experience providing services to the commodities industry and related trading areas, we understand your business. There is no long learning curve to waste your money.
- § In addition, our methodology keeps fees affordable by focusing on the essential vulnerabilities of your operation and by training your own people to be self-sufficient business continuity managers. This enables our engagements to be shorter, less disruptive and far less expensive than would otherwise be the case. We don't waste your time and we don't waste your money.

If your firm that does not want to acquire a business continuity staff, we can help prepare a comprehensive plan that will satisfy exchanges, regulatory agencies and business counterparties. Alternatively, we can train your staff in business continuity concepts, provide them with tools for risk assessment, business impact analysis and plan creation and work with them to ensure that these tasks are properly done. If you have a plan already in place, we can provide an independent plan audit and assessment, and help develop tests and simulations to make sure that the plan actually works.

**Business continuity planning is an investment, not a cost.** Your major competitors already have these plans in place, putting you at a disadvantage. We can help level the playing field. Contact us at 212 865-5400 or email [david@omnimath.com](mailto:david@omnimath.com) for more information or to set up a meeting to discuss your business continuity needs.

## **Business Continuity Goals**

### 1. Safeguarding of Assets

- Personnel
- Trading Positions
- Cash and Financial Instruments
- Information
- Copyrights, Patents, etc.
- Reputation

### 2. Protection of Trading Operations

- Order Activities
- Trading Activities and Clearing
- Position Maintenance
- Margining
- Back Office Support Activities and Regulatory Reporting

### 3. Protection of Information Flow

- Telecommunications
- Intranet
- Internet
- Exchange, Clearing Broker and Floor Broker communications
- Supplier Relations
- Customer Relations
- Shareholder/Limited Partner Relations
- Community Relations
- Accounting

### 4. Conformity to Legal and Regulatory Requirements

- Accounting/Auditing/Records Retention
- Regulatory Agency Coordination
- Ownership Legal Issues

### 5. Organizational Continuity

- Key personnel succession and trading permissions
- Working Capital and Credit Lines
- Funding Entities
- Misfeasance/Malfeasance/Embezzlement

## **Key Business Continuity Concepts**

### **1. Scope**

Business continuity (BC) planning extends beyond the usual IT disaster recovery planning to encompass the entire enterprise. Simply put, business continuity planning is an insurance policy that will ensure the survival of the enterprise when disruptive events occur. For the plan to be effective, it must consider the enterprise across business units, across geographical boundaries, and across functional areas. It must also consider the relationships that the enterprise has with suppliers, exchanges, clearing brokers, floor brokers (upstream) and customers and limited partners (downstream), and with the communities in which the enterprise resides. In addition, regulatory agencies impose requirements that may not be ignored.

### **2. The Business Continuity Coordinating Group**

In order for any business continuity process to be effective, it cannot be imposed from the outside. It must be created by members of the organization it is designed to protect, utilizing whatever outside resources are required to supplement in-house skills and knowledge. While one or more people in the organization may be charged with primary responsibility for doing what is necessary to get an effective business continuity process operational, the coordinating group which supports the primary BC plan builders must be representative of, and knowledgeable about, all enterprise business units, functional areas and geographical locations. The function of the coordinating group is to supply information to those creating and maintaining the business continuity plan, and to bring information about the planning process back to their specific areas of endeavor. While the primary BC plan builders (the Business Continuity Management Team) may have this responsibility either full or part-time, the coordinating group is envisioned as a part-time responsibility distinct from members' primary responsibilities.

### **3. The Business Continuity Management Team**

The Business Continuity Management Team are those in-house personnel charged with creating and maintaining the business continuity plan and directing the fire drills and simulations needed to test the plan and keep it current.

Whether discharging their responsibilities on a part-time or full-time basis, Team members must be fully trained in all phases of the business continuity process. During a crisis, Team members will serve a central coordinating function and provide guidance as to plan contents and requirements to those who are designated by the plan to carry out the various restoration and recovery activities.

#### **4. Risk and Business Impact Analysis**

Prior to any plan development, a Risk/Business Impact Analysis must be performed. Often treated as separate tasks, Risk Analysis and Business Impact Analysis are two sides of the same coin. Risk analysis identifies events that could have a disruptive impact on the organization's assets, revenues, profitability or reputation, and attempts to assign probabilities for their occurrence. Business impact analysis identifies how and where these disruptive events will impact the organization, both directly and indirectly, and attempts to assign dollar figures to the losses involved. Deciding what to protect against, how to protect against it, and how much to spend in achieving that protection is a cost-benefit analysis that uses information from both the risk and business impact analyses. (Bear in mind, however, that some losses are intangible and not easily quantified; these must nevertheless be included in these analyses.)

#### **5. Business Continuity Plan**

A business continuity plan is an organization' s guide to action in a crisis. The plan can be documented as a standards book, but is often (and more effectively) implemented as a series of check lists or single documents that can be followed in an emergency. The plan must contain the following elements:

- Identification of business functional areas
- Identification of which business functions have greatest impact on organizational functioning
- Plan activation procedures, including
  - Notification
  - Disaster declaration procedures
  - Mobilization procedures
- Identification of preferred recovery strategies for each functional area
- Identification of command and control requirements
- Action plans/checklists
- Damage assessment concepts
- Definition of acceptable baseline recovery
- Damage assessment and recovery and restoration strategy
- Emergency response procedures, including
  - Reporting Procedures

- Pre-incident preparation
- Emergency actions
- Damage mitigation
- Communication to staff
- Definition of work teams and strategy for initial on-site activity
- Cataloging of data processing and documentation critical to the organization' s key business(es)
- Provision for alternative workspace, IT remote site(s)
- Provision for alternative communication facilities
- Definition of IT recovery time objectives and recovery point objectives for each critical facility, database and end-user application
- Provisions for information continuity
- Provisions for process continuity
- Procedures for maintaining the business continuity plan, including the integration of findings from independent auditors, plan reviewers and community emergency agencies.
- Metrics and schedules for plan testing and crisis simulation

Each section of the business continuity plan should be accompanied by budgetary information for on-going costs involved in crisis mitigation, recovery and restoration. Budgets for plan maintenance must also be created.

## **6. Business Continuity Plan Testing and Crisis Simulation**

Business continuity planning is valuable in two ways: the process of creating a plan exposes vulnerabilities within the organization and starts key personnel thinking about ways to mitigate these vulnerabilities and deal with problems that might occur during a crisis; and the plan, once created, serves as a guide to action during a critical incident.

A written plan, however, is of little use if the employees of the enterprise are not conversant with its provisions, and have not had the opportunity to use it under non-crisis conditions. Periodic scheduled testing of business continuity plans allows these plans to become familiar to personnel and should highlight any plan inadequacies.

Following plan testing, an evaluation session must be held. A proper evaluation requires that measurement guidelines of plan effectiveness be thought out prior to the test. Using these metrics and anecdotal reports, a test report can be prepared with findings, and plans can be updated to corrective deficiencies or accommodate changes in business conditions.

Tests can be announced or on a surprise basis. They can be as simple as a paper walk-through of various scenarios, or as elaborate as a staged disaster scenario. The exercise

can cover the entire enterprise, or be restricted to a business unit, geographical area or business function (department).

## **7. Crisis Communications**

Communication during a crisis is one of the most critical activities to occur. Employees need to be told of the crisis; they need to know whether or not to come to work (or to leave work); they need to be told where to assemble for evacuation, or where to assemble to carry out their work if their normal workplace is unavailable; they need to be told what tools are available for their use and what their reporting structure will be during and after the crisis; they need to be told when the crisis is over. Certain types of crises require communication with the media; other types of crises require communications with governmental emergency services and regulatory bodies. Suppliers need to know what is required of them and where goods are to be sent; clearing brokers and floor brokers need to know how contact is to be maintained and who is empowered to act on behalf of the firm, and customers need to know what to expect. Shareholders, limited partners and other corporate stakeholders need to know the impact of the crisis on their investments.

A crisis communications plan must take all of these needs into account. It must enable the organization to send and receive critical communications when premises are evacuated, when phone lines are down, when the Internet fails, or when people are not at their usual numbers.

A crisis communications plan must also specify who speaks for the organization under a variety of scenarios, and who is the point of contact between the governmental emergency response agencies and the organization.

## **8. Coordination with External Agencies**

External agencies include fire and safety organizations (fire and police departments), health organizations (hospitals, Centers for Disease Control, EMS, ambulance services), environmental agencies, regulatory agencies, and insurance companies. The organization has a stake in complying with the requirements of these organizations, and faces several kinds of liability if the compliance is not effective.

In some cases, coordination takes the form of receiving information; in other cases there is a reporting requirement; in still other cases, specific actions are mandated. The business continuity process must accommodate all of these.



## **Independent Audit, Plan Testing and Plan Maintenance**

### **I. Plan Reviews**

OmniMath prepares three types of independent business continuity audits: a document review, a gap analysis, and a maturity review. The document review examines all plan documents for completeness and reasonableness; the gap analysis compares actualities to the plan and determines gaps between plan requirements and existing provisions; the maturity review uses a Business Continuity Maturity Model concept to place the organization on a scale of planning maturity, and to allow comparisons to other organizations in the same industry or geographic area.

The document review checks the plan against OmniMath's Business Continuity Plan Required Elements document to determine if the plan covers all critical functions and business areas, and provides procedures for personnel management, asset protection and business recovery during a crisis. Areas in which the plan falls short of completeness or is poorly structured are highlighted for corrective action.

The Maturity Model analysis uses the plan documents to place the organization on a continuum of planning progress: the higher the Maturity Level, the greater the coverage of plan elements within the organization and the more business continuity planning has been adopted as a critical business element in its own right, embedded in the corporate culture and making a contribution to corporate risk management and profitability.

The gap analysis is an extensive review that uses the Business Continuity Plan document as a starting point, and applies real-world checks to determine the extent to which the plan has actually been implemented.

### **II. Plan Testing and Maintenance**

Business continuity management is a living process. A static plan becomes useless in a short period of time; an untested plan may fail at the crucial moment; without exercises that invoke the plan during a simulated crisis, employees and management will never learn their tasks and responsibilities under the plan, and will be unable to perform when reference to a paper document is impractical.

Plan testing has four components: development of testing metrics, development of test procedures; running the test and acquiring the measurements; and applying test outcomes to plan revision. Without defining measurements and goals, it is hard to make sense of the test results. Test procedures, either in the form of paper review or a simulation scenario, define how the test is to be run and what outcomes are expected. Running the test, whether it be a paper walk-through or a complex simulation of a crisis, provides the actual data that is used to measure how well the plan has performed. Finally, the analysis of the data acquired during the test must result in a plan update, or the test has no value.

### **III.OmniMath's Role**

OmniMath can provide a skillful, unbiased and cost-efficient independent review of business continuity preparedness. Cooperation of the client staff is needed to locate documents and to answer questions the OmniMath reviewer may have, but the review itself is conducted entirely by OmniMath. The scope and intensity of the review can be tailored to suit the review requirements imposed by regulators, industry and professional compliance rules, and internal requirements.

At the conclusion of the review, a document is produced detailing the current state of the business continuity process in the client organization, with recommendations for changes and improvements, where warranted. Clients having specific legal or regulatory requirements will find that the review report references these requirements as part of the review process.

OmniMath's role in the testing and plan maintenance tasks can range from training in-house staff in the selection of metrics and creation of tests, to actually choosing the metrics for the client, creating and administering the tests, and creating and producing the simulation scenario. Following the testing/scenario phase, OmniMath can assist in evaluating the test results and can work with in-house staff to update the plan.

## The OmniMath Business Continuity Process

The goal of an OmniMath Business Continuity engagement is to leave the client with a trained business continuity staff and a functional and tested business continuity plan created by that staff with OmniMath's guidance and support. By having the client's staff create and manage the business continuity process, plan creation and maintenance costs are reduced, plan effectiveness is increased, and staff and management "buy in" is assured.

The basic axioms of OmniMath's business continuity consultancy are:

- Building a business continuity structure is a modular process, with each stage of the process having a tangible payoff
- Business continuity planning is best done by properly trained and guided personnel of the enterprise
- Management commitment to business continuity planning and execution is critical
- Business continuity planning is driven by cost/benefit decisions
- Business continuity is an ongoing process, with continual testing and revision
- Business continuity planning must embrace the entire enterprise

Business continuity management identifies potential events that threaten an organization, provides a framework for building organizational resilience to these events, and provides for a review and exercise mechanism to ensure that the organization's response to crisis is adequate and up to date. The objectives of an effective business continuity strategy are to:

- Ensure the safety of staff and visitors
- Protect the organization's assets
- Minimize the impact of crisis events on the organization's ability to function
- Fulfill legal, regulatory and insurance requirements
- Protect the organization's reputation
- Mitigate crisis impact beyond the organization

Business continuity management must include components from risk management, disaster recovery, facilities management, supply chain management, quality management, health and safety, knowledge management, emergency management, security and crisis communications and PR. Planning efforts in these areas must focus on critical business functions and areas of greatest risk; cost efficiency criteria apply to the business continuity function as they must to all other business areas.

## A Typical Business Continuity Engagement Plan

Phase	Tasks	Deliverables
I. Preliminary Review	1. Determine organizational scope 2. View status of current Business Continuity planning 3. Determine critical business areas	1. Business continuity planning status report 2. Establishment of business continuity coordinating group and leader 3. Critical area / critical function list
II. Risk Analysis/Business Impact Analysis Review	1. Train coordinating group members in impact analysis techniques 2. For each critical business area, determine critical functions and potential points of failure 3. Estimate the likelihood of various risk scenarios 4. Estimate the impact of each of these scenarios on the conduct of business operations	1. Impact analysis report 2. Coordinating group trained
III. Creating, Revising, or Bolstering the Business Continuity Plan - Pilot	1. Train coordinating committee members in initial plan creation 2. Recommend an education program for professional business continuity management 3. As a pilot operation, select a business unit or geographical location and develop an initial business continuity plan if none exists; or revise or improve the existing business continuity plan	1. Members trained in business continuity concepts 2. Educational recommendations in place 3. A pilot business continuity plan is created for a business unit or location

Phase	Tasks	Deliverables
IV. Testing, Measuring, Exercising and Revising the Business Continuity Program - Pilot	<ol style="list-style-type: none"> <li>1. Train BC staff members in BC metrics</li> <li>2. Establish business continuity metrics and benchmarks</li> <li>3. Prepare fire drills and disaster scenarios</li> <li>4. Desk check plan and run limited fire drills, applying metrics</li> <li>5. Create testing schedule</li> <li>6. Run fire drills and scenarios per schedule</li> <li>7. Revise plans per test results</li> </ol>	<ol style="list-style-type: none"> <li>1. Staff trained in metrics</li> <li>2. Metrics and benchmarks established for the pilot functional/business area</li> <li>3. Initial plan testing</li> <li>4. Test schedule created</li> <li>5. Revised pilot business continuity pan</li> </ol>
V. Creating, Revising, or Bolstering the Business Continuity Plan - Enterprise	<ol style="list-style-type: none"> <li>1. Review with senior management results of pilot operation and plans to extend to enterprise</li> <li>2. Review BC staffing and coordinating group makeup</li> <li>3. Extend the pilot business continuity plan to the enterprise if no enterprise-wide plan exists; or revise or improve the existing enterprise-wide business continuity plan.</li> </ol>	<ol style="list-style-type: none"> <li>1. Senior management accepts extension to enterprise</li> <li>2. Enterprise coordinating group solidified</li> <li>3. An enterprise-wide business continuity plan is created or updated.</li> </ol>
VI. Testing, Measuring, Exercising and Revising the Business Continuity Program	<ol style="list-style-type: none"> <li>1. Extend business continuity metrics and benchmarks enterprise-wide</li> <li>2. Create plan maintenance mechanism</li> <li>3. Prepare fire drills and disaster scenarios</li> <li>4. Create testing schedule</li> <li>5. Run fire drills and scenarios per schedule, applying metrics</li> <li>6. Revise plans per test results</li> <li>7. Revise plans as business or threat conditions change</li> </ol>	<ol style="list-style-type: none"> <li>1. Metrics and benchmarks established for each functional/business area</li> <li>2. Test schedule created</li> <li>3. Enterprise plan tested</li> <li>4. Plans revised per test results, in accordance with maintenance procedures</li> </ol>

Phase	Tasks	Deliverables
VII. Independent Plan Review	<ol style="list-style-type: none"> <li>1. Establish responsibilities for independent review</li> <li>2. Create review criteria</li> <li>3. Select reviewing agencies</li> <li>4. Create review schedules</li> <li>5. Independent reviews take place</li> <li>6. Revise Business Continuity, crisis and audit management process per review results</li> </ol>	<ol style="list-style-type: none"> <li>1. Independent review plan</li> <li>2. Review vendor list</li> <li>3. Review schedule</li> <li>4. Initial independent reviews</li> <li>5. Revised BC process</li> </ol>