



Preventing disasters to the revenue stream

BY ROBERT BELL

NEW YORK – It has been a year of catastrophe, stretching from one side of the globe to the other. From the fearsome tsunami that struck from the Indian Ocean last December to Hurricane Katrina roaring in from the Gulf of Mexico in September this year, nature has done her best to remind us how fragile we, and our creations, truly are.

The human dimension aside, the broadcast industry has a complex relationship to disasters. So does the satellite communications industry that serves broadcasters.

On the one hand, disasters are good for business. The world races to its TV sets and radios when disaster strikes. Audiences swell, supporting robust advertising revenues. SNG trucks race to the scene, satellite phones rack up minutes, and transportable antennas are deployed to replace disrupted terrestrial networks.

A friend of mine once ran the biggest teleport in the Washington DC metropolitan area. Its business was driven by news and, as a joke, I used to accuse him of arranging for people to scale the White House fence when he needed help in making his quarterly revenue goals.

On the other hand, natural and man-made disasters threaten the facilities that are essential to programme contribution and distribution — and the revenues that depend on them.

This year of disasters has us all take a hard look at the ability of broadcast control, terrestrial transmission networks, master control, uplinks and downlinks to survive a catastrophe. Whether or not they do is largely up to how well we plan for disaster and ensure the redundancy of critical systems.

Benefits of planning

World Teleport Association has just published a white paper titled *Business Continuity Planning for the Teleport*. Written by veteran engineer Sidney Skjei, president of Skjei Telecom

Association UPDATE

(www.skjeitelecom.com), the white paper offers step-by-step advice on the fundamentals of disaster planning for any programme origination or transmission facility.

Skjei lists several critical business needs for a sound disaster plan, which should:

- Invariably reduces the outage time following a disaster.
- Provides a consensus-building exercise for the team

from a disaster. It takes a team, and that team will be most effective if it has collectively developed the plans and preparations that will go into effect when disaster strikes. Advance planning also protects employees from the risks of decisions made in a crisis.

For example, an immediate response to terrorist-initiated hazardous material scenarios is to turn off the facility's ventilation system to protect employees. But most transmission equipment can survive only a few minutes without air-conditioning. Good planning can help resolve this conflict in advance.

others do not.

After completing a threat assessment, the planning team should develop a business impact analysis for each disaster scenario. The analysis identifies critical functions affected and response times required when that disaster occur: everything from personnel safety and customer interconnections, production or programme origination to finance and payroll.

With disaster scenarios and business impact analyses completed, the next step is to determine restorable solutions for each critical function, in order to reduce or eliminate downtime.

should review it together, discuss concerns and problems, and reach agreement on trade-offs. Only when this is done should the final plan be written. The writing itself is a straightforward and fairly easy process, because the critical labour has all been done beforehand.

Basics of redundancy

If money were no object, disaster planning would be easy. You would simply build two or three of every facility or network and run the backups on "hot standby" in order to guarantee 24x7x365 operation under even the worst of circumstances.

However, as money always is an object, decisions must be taken and trade-offs accepted. Some of the most common areas where companies typically choose to invest in redundancy include:

- Redundant routing of optical fibre and other circuits through opposite sides of a facility and via different carriers. In the wake of the loss of all telecom service in New York City on 9-11 due to the destruction of a switching centre, some companies also ensure that the carriers do not share any network hubs.

- Maintenance of one or more agile satellite antennas that can be brought into operation quickly in the event of equipment failure.

- In areas affected by heavy rains that can cause satellite outage, companies often invest in a backup uplink located 40 or more kilometres away, with automated monitor and control systems to switch transmission to the backup in milliseconds in the event of rain fade at the primary uplink.

The choices made in preparing for disaster are always specific to the organisation, its critical functions and its actual facilities. But all broadcast and satellite organisations share the need to take disaster planning and system redundancy seriously. Although the sun may shine today, it is only a matter of time before the dark clouds will gather again on the horizon.



The broadcast industry has a complex relationship with natural disasters.

that will be responsible for recovering from a disaster, allowing them to make decisions and reach consensus in an unstressed environment.

- Pays for itself by (a) permitting development of low-cost or no-cost options; (b) integrating disaster preparedness into normal capital spending; and (c) moving recovery expenses out of the day-to-day operating budget to an expense that can be covered by risk-management insurance.

No individual ever recovers

Fundamentals of disaster planning

In his WTA white paper, Skjei also explains how to plan for disaster. The first and most vital step is to obtain the commitment of senior management. This is necessary not only to justify time spent on the planning effort, but also because the plan may result in requests for additional funding.

The next step is to conduct a threat assessment that lists specific disaster scenarios. Fire and flooding, for example, are quite different from response to an external hazardous material. In one case, you evacuate; in the other, you shelter in place. Each organisation's list of threats and scenarios will be different. One organisation may need to choose to include a labour strike, while

According to Skjei, "the most efficient way of doing this is to construct a 'solutions matrix', listing scenarios and functions. For example, under the 'Tower Collapse' scenario and the 'Broadcast Programme Distribution' critical function, you might insert 'Playout Evergreen' materials for first 72 hours, then restore tower by obtaining a hand-crank tower from 'XYZ Corporation'."

When all of this good work is done, the job is not finished. Most vital of all is to obtain consensus and commitment to the solutions, or to negotiate changes that will produce that consensus and commitment. It is not enough to have a good plan on paper; the key decision-makers in the organisation

World Teleport Association will alternate with Asia-Pacific Broadcasting Union and CASBAA to appear in every other issue of APB, highlighting various association news to the industry.



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