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## Regulators should let carriers innovate to boost network reliability

By [Deborah Yao](#)

Hurricane Sandy could usher in new regulations for communications companies as they look to shore up their network reliability in the face of massive outages, but it is best for the government to give carriers flexibility in executing their plans, industry experts told SNL Kagan.

"Leaving the deployment choices to the carrier can provide more continuity of service than trying to micromanage," said Trey Hanbury, a former director of government affairs at [Sprint Nextel Corp.](#) who is now a partner in the technology, media and telecoms practice at law firm Hogan Lovells in Washington, D.C. "Looking more at the ends can guarantee a minimum level of service; leave it to the carriers to innovate." For example, requiring that every facility have 100 gallons of fuel to power generators is "impractical" in many locations such as the tops of residential apartment buildings, he said.

Carriers could also be required to build a minimum number of cell towers in an area, so that if some are not operational others can pick up the slack, Hanbury said. However, such plans also depend on obtaining permits from local authorities, which can be tricky. That is one reason why rival carriers sometimes use the same cell tower, but then two carriers' signals can go down if the tower loses power or is toppled in a natural disaster, he said.



After Hurricane Katrina, regulators tried to institute an eight-hour minimum backup power requirement, but that does not help if the fiber-optic cable is severed, Hanbury said.

That is why specific quantitative mandates from regulators will be less effective than giving the carrier the flexibility to choose the best paths for network resiliency.

"One of the things we should keep in mind here is we are talking about an industry or sector that has commercial and economic incentive to ensure redundancy and backup," said Dave Thomas, a partner who works with Hanbury at the law firm. "We're talking about a very competitive and pretty well-diversified industry. They are going to find ways to achieve the sorts of service metrics that are necessary to remain viable."

Overall, "network performance metrics should be the focus," Thomas said. Carriers, for example, could guarantee that some level of service will be restored within a set number of hours, Hanbury said.

For carriers, mobile units that restore some semblance of cellphone service in an area are much more affordable and flexible because they can be moved around to different disaster areas, whether they are in California for wildfires or Florida for hurricanes.

Part of the problem carriers face is that they cannot know where disaster will hit next, and it is too expensive and difficult to build a cell tower that can "survive all hazards," Hanbury said. As such, a mobile unit can be an effective temporary solution to restore networks in disaster areas.

It also is harder to establish backups close to the customer than it is at a regional hub. "From end user to the end node, that is difficult and a costly last mile to replicate, whether wired or wireless," Hanbury said.

The situation becomes more complex because states also get to weigh in on the issue.

"There is going to be, certainly, a lot of study of this by policymakers and regulators, and it could result in regulation, ultimately," Thomas said.

In the meantime, companies such as RingCentral are serving as de facto telecom backups for businesses in disaster areas. The company provides cloud-based phone services.

Curtis Peterson, vice president of operations at RingCentral, told SNL Kagan that the company picked up new East Coast customers post-Sandy who decided to use the company's services because the local phone company was down.

"We found a significant uptick in customers that called us to move their service to RingCentral because the local phone companies were busy restoring [service to] hospitals and other major institutions."

Businesses were told it would take 30 to 90 days for their service to return, Peterson said.

RingCentral has facilities in Washington, D.C.; New York; Seattle; and San Jose, Calif. Peterson said these were chosen for their diversity in geography, weather patterns and risk profiles.

Cloud-based telecom services are "really changing the art of disaster recovery and business recovery," Peterson said. "We're looking at a new era."