

Before the  
Federal Communications Commission  
Washington, DC 20554

September 15, 2005 FCC Open Meeting )  
Atlanta, GA )  
Hurricane Katrina Communications Recovery )

Testimony of Steve Brownworth  
Vice President, Network Planning  
ITC^DeltaCom, Inc.

Thank you, Chairman Martin and the other members of the Commission, for giving me the opportunity to discuss the efforts of ITC^DeltaCom to maintain and restore communications service to our wholesale and retail customers in the wake of Hurricane Katrina. I would also like to thank the Chairman, and the Commission, for their support, the initiative the Commission has taken to reach out to all carriers to cut red tape, and the Commission's efforts to act as a liaison between the carrier community and the various federal disaster-recovery agencies in order to restore communications and facilitate the relief effort.

As Vice President, Network Planning, I am responsible for the planning, provisioning and supporting operations in the disaster recovery efforts of ITC^DeltaCom. I will explain the degree to which Hurricane Katrina destroyed ITC^DeltaCom facilities, and disrupted service for our customers, primarily in the states of Louisiana and Mississippi, as well as the actions taken by ITC^DeltaCom to restore service to our existing wholesale and retail customers—in many cases by engineering emergency accommodations for these customers—and our efforts to facilitate overall disaster

recovery in the region by providing emergency communications services to local, state, and federal emergency workers. Finally, the purpose of my testimony is to demonstrate the critical importance of diverse, independently operated wireline communications facilities to disaster recovery and service maintenance for our country's local and long-haul, and wireless as well as wireline, communications networks.

Company Background and Description

Although ITC^DeltaCom can trace its history back over 100 years from its founding as a small, independent telephone company in West Point, GA, ITC^DeltaCom is today an integrated competitive provider of local, long-haul, voice, data, wholesale, and retail telecommunications and Internet services to primarily business, but also some residential, customers throughout the Southeastern United States. We are still headquartered in West Point, GA, and, as you will see, we are an integral part of every community we serve.

To provide the services described above, ITC^DeltaCom relies on a 14-state synchronous optical network (SONET). This network is operated over 14,000 route miles of fiber optic lines, almost 11,000 of which are company-owned. The ITC^DeltaCom network is comprised of point-to-point circuits, a multi-level hierarchy of connectivity architecture, and high-speed, redundant routers and switches. Specifically, ITC^DeltaCom's network has 240 "Points of Presence (POPs)," 28 voice switches, 81 frame relay switches and asynchronous transfer mode (ATM) switches, 48 next-generation soft switches, and 258 collocations with other carriers. Among the critical facilities ITC^DeltaCom has in Louisiana and Mississippi are a large POP for Internet,

data, and frame relay in New Orleans, LA and a very large voice switch in Gulfport, MS, along with eight smaller POPs, and thousands of miles of fiber.

#### Effects of Hurricane Katrina

Within only hours of the hurricane passing through, there were five fiber cuts across the network. The storm isolated over 110 DS3s of customer and network facilities. We lost service for a short period of time at our switch site in Gulfport, MS and while our New Orleans site continued to operate with partial service, it was isolated from our switch in Gulfport. The fiber cuts also isolated portions of Baton Rouge, LA; Lafayette, LA; Tupelo, MS; Jackson, MS; Meridian, MS; and Hattiesburg, MS.

Even as the hurricane was still in Southern MS, our operational first responders, comprised entirely of ITC^DeltaCom employees, were in route with supplies. After driving all day, the crews could not get into Gulfport and many spent what was the first of many nights sleeping in trucks or the switch room floor. Before getting to the switch site the next day, one of the crews restored fiber along the way. ITC^DeltaCom employees worked throughout the first week and through Labor Day weekend, most working with 3-5 hours of sleep over the entire week, to get our network restored. Our people worked in a team effort with Alabama Power, Georgia Power, Mississippi Power, Entergy, contractors and other carriers. Under adverse conditions of long-hours, heat, lack of facilities, running water, security road-blocks and no electricity, this team worked in the hurricane-impacted areas to restore our switch, POP sites, and fiber network.

After the first week, all but a few DS3s were in-service outside of New Orleans, LA. Presently, all of our transmission and switching facilities are operational. However, due to the large amount of heavy equipment being deployed to clear debris throughout

the disaster area, we have to contend with right-of-way maintenance and potential fiber cuts on a daily basis. Nonetheless, due to the redundancy with which our network was engineered, and the assistance of other competitive carriers, these subsequent facilities repairs generally do not constitute a threat to customer service.

While not unique to ITC^DeltaCom, among all of the carriers and other utilities struggling to restore service in the hurricane-impacted areas, here are just a few illustrations of the "above and beyond" actions taken by our employees to restore communications service to our customers:

-The hurricane caused power to our Gulfport switch site to fail and our technician could not access the site, due to the wind, debris and flooding in the area. One of the switch techs made it to the site and was able to borrow a 2-way radio from a power company to make a call back to us. His ability to get to the switch quickly, secure the site and restart the generator, saved serious damage to our switch and facility. The switch room itself had some water from a damaged roof, which the team repaired with plastic, 2x4s and duct tape and converted it to our own command and evacuation center, with water, food and cots. We were able to lease a mobile camper to the switch site so showers could be taken.

-Two employees rented an airboat and guide to cross 15 miles of Lake Pontchartrain in order to get to our New Orleans site, which was cut off in all directions by the flooding. They saw a helicopter, tied up the airboat and were able to procure the pilot for assistance. Not only were they able to get the helicopter to the New Orleans site, but upon finding it intact, they were able to get a return flight back to Gulfport (saving them 4 hours of boat and drive time).

-The same team brought in 1,500 gallons of propane and equipment to the site, via truck, to get New Orleans operational within seven days.

-One fiber cut, isolating Hattiesburg, MS, involved a flooded basement and semi truck that rolled onto our fiber access site. A contractor gave us the keys to his \$400,000 backhoe, just so we could restore our fiber and return service. The team gave him and his wife some food and water as a thank-you.

-Another fiber cut, between Gulfport and New Orleans, involved moving over ½ mile of urban debris including the concrete utility poles carrying our fiber that were shattered in the middle.

### Other Carriers and Rescue Workers

Because of the size and scope of ITC^DeltaCom's fiber network, we provide many services to wholesale customers, including wireless carriers, Internet backbone providers, and other competitive carriers. Throughout the disaster region—in addition to supporting the field workers—our operational support people provisioned services for the State Government, American Red Cross, Municipalities, priority customers, and other carriers, ensuring that communications remain available to their customers as well as our own. Additionally, we have been the recipient of network services from other fiber-based competitors where our own service was down. The diversity of competitive wireline and wireless networks in the southeast has enabled all carriers to work together to provide communications service to each other, hurricane survivors still in the area, and the many rescue and relief workers assisting in the disaster recovery. While it would be impossible to list each instance of cooperation, here are just a few examples of the helpful and innovative ways in which we and others have worked together to restore service, or to make service available to rescue workers:

-We were able to quickly restore/re-provision over 40 DS3s on the network thanks to help and facilities from Entergy and our other carriers.

-For one period of time, we had the only working IXC switch in Gulfport. We set up 49 phones off the Gulfport Switch for rescuers and residents to use to call for assistance, family and friends.

-We were able to quickly provide IXC and CLECs with alternative routing of our fiber network and connectivity to our IP network.

-We have been able to recover our local and long-distance trunk groups on the Gulfport switch, including 800 service to Florida for children to start school.

-Within days we enabled T-Mobile to install a temporary radio tower beside our Gulfport Switch, and ran 10 DS1s to the tower, so that T-Mobile could restore service to the residents and rescue workers in the Gulfport business district.

-We were able to quickly re-route multiple high capacity circuits for NuVox and WilTel, both of whom were providing service to critical facilities such as hospitals and the American Red Cross.

### Lessons for the Future

While no one can anticipate a disaster of the magnitude that we have seen in the aftermath of Hurricane Katrina, we can take steps to ensure that we are better prepared in the future. In many cases, we and other carriers believed they had achieved fiber route diversity by using multiple carriers with diverse fiber routing—in some cases 5-10 miles apart. Normally, this level of diversity is sufficient for human-error or natural disaster fiber cut disruptions. However, when, as here, the path of destruction has the potential to be much wider, steps must be taken to improve reliability. To this end, ITC^DeltaCom and several other competitive carriers are beginning to examine the feasibility of a joint build in order to install more redundant facilities much further inland, in order to be completely out of a hurricane path, but still be accessible to serve the coastal areas.

Nonetheless, despite the weaknesses exposed by the unprecedented destruction of Hurricane Katrina, the disaster did expose some critical strengths. One of these strengths in our communications network that will hopefully remain a fundamental feature of our country's future network and policy is the virtue of multiple carriers using multiple networks using multiple technologies. By having a "network of networks" interconnected in many different points, every carrier was able to play an important role in the recovery and restoration of communications. The Commission recognized this and began immediately reaching out to all network providers, and to coordinate offers of, and

requests for, help among government agencies. Obviously, the more carriers that are able to provide service, using any technology, the stronger our shared network.

The other strength, of course, is that of the people in the communications industry. At ITC^DeltaCom, and I'm sure other carriers, all along the way no one said "no." The team had to push to get what they wanted many times, but they got the support and resources they needed to make our network available for service.

Thank you for the opportunity to address the Commission.