



Welcome

NAS CIO's Disaster Recovery Webinar Series

**Moderator: Drew Leatherby, NAS CIO
Issues Coordinator**



Asking Questions

- Please use the Question & Answer feature to ask questions at any time
- All questions will be addressed at the end of the presentation
- Responses to any questions not answered on the call will be distributed to all participants via email after the event



Technical Support

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- **Dial *0 (if you have joined by phone)**
- **Call Raindance Tech Support at 1-888-966-8686 (if you have selected the Webcasting option)**



Together with NEXTEL

Communications Continuity: *Understanding The Environment And How It Effects Your Operational Success*

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August 2007

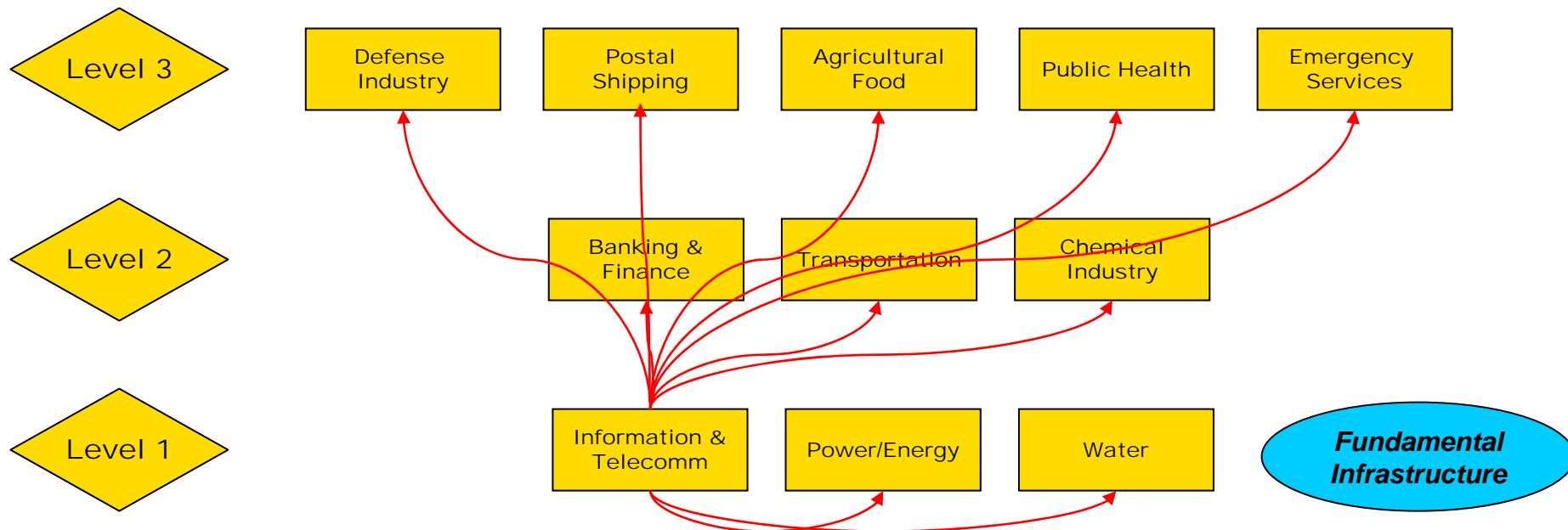
UNDERSTANDING COMMUNICATIONS AS CRITICAL INFRASTRUCTURE

Communications is a Core Critical Infrastructure

Executive Order 13010,2 signed by President Clinton on July 15, 1996, which established the President's Commission on Critical Infrastructure Protection, alluded to what makes an infrastructure critical:

"Certain national infrastructures are so vital that their incapacity or destruction would have a debilitating impact on the defense or economic security of the United States."

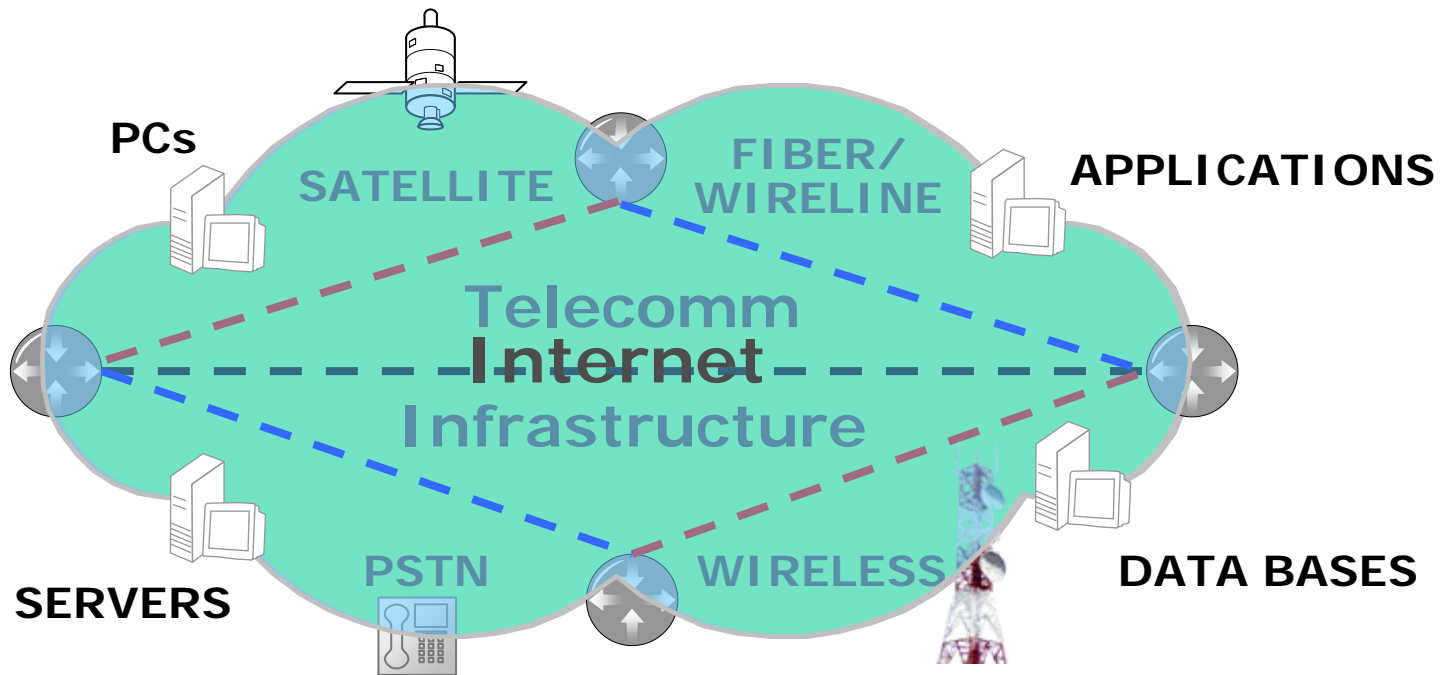
85% of all critical infrastructure is owned & operated by the private sector



Communications: Two Core Components

Telecomm provides the backbone for the Internet

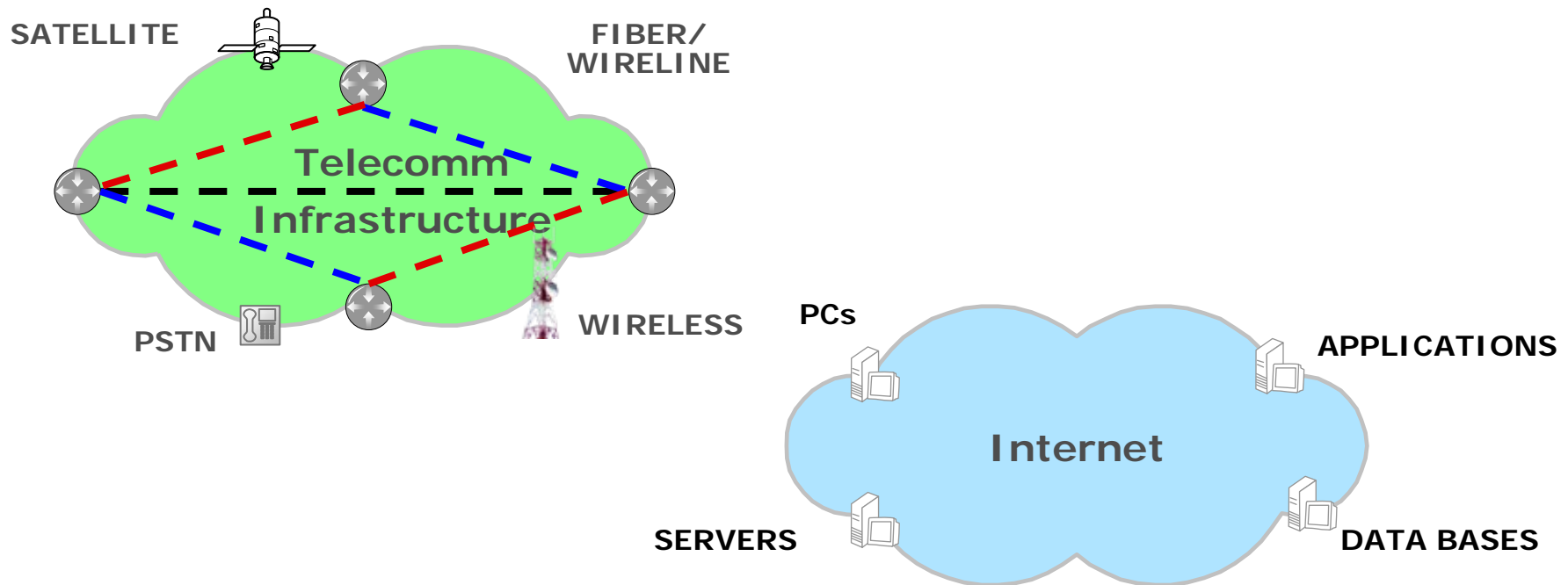
CONVERGENCE



Internet facilitates information for mission critical decisions

Communications: Threats to Core Components

Telecomm threats are physical in nature; cut links, power loss, damaged facilities, etc...

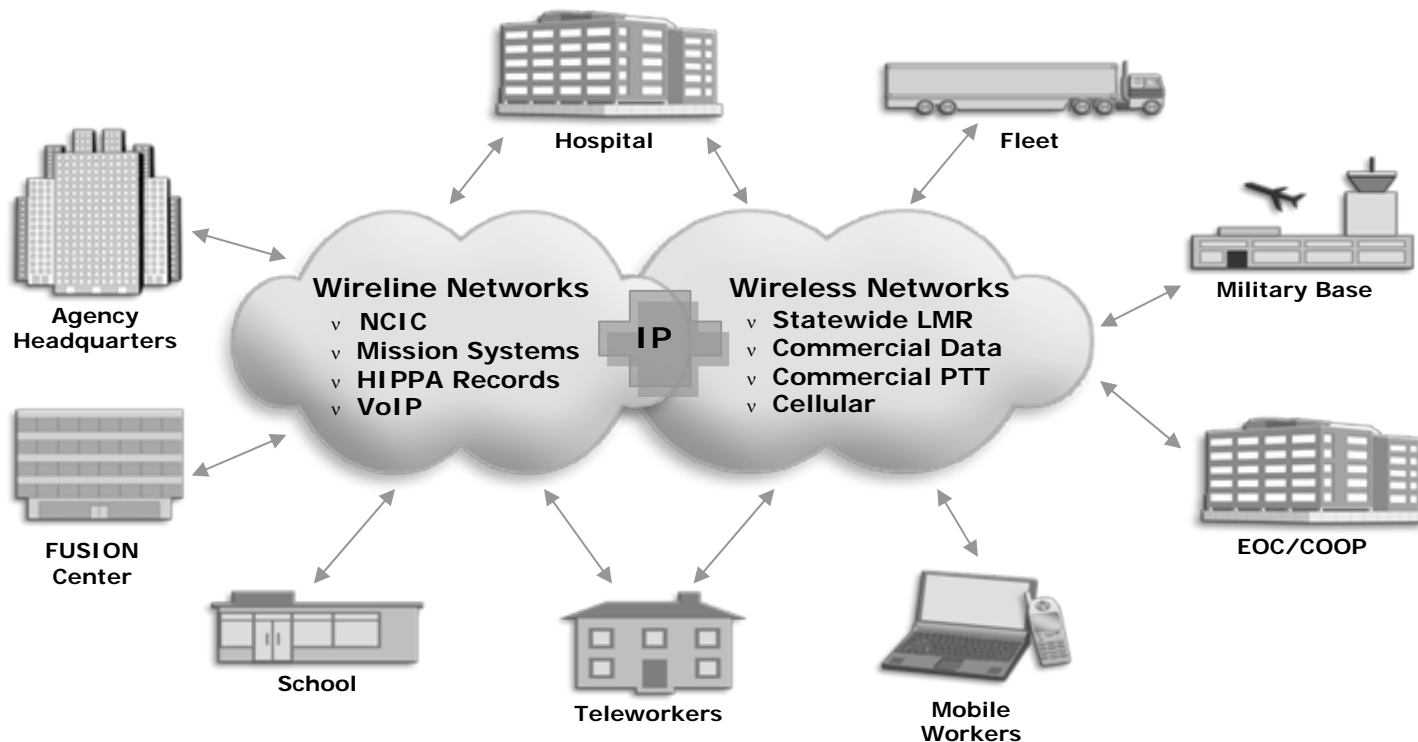


Internet threat can be both virtual and physical in nature; viruses, DOS attacks, server destruction, etc...

Communications & The Operating Environment

Converged Communications Infrastructure:

Has facilitated the ability to deploy an enterprise-wide architecture supporting both agencies and corporations



UNDERSTANDING THREATS TO COMMUNICATIONS INFRASTRUCTURE

Operating Environment – Man Made Hazards



2001



These events either physically impaired the IT/Telecom sector and/or required the government to force industry to manage access and traffic... impacting the ability of this sector to support response and mitigation efforts.

Minneapolis Bridge Collapse

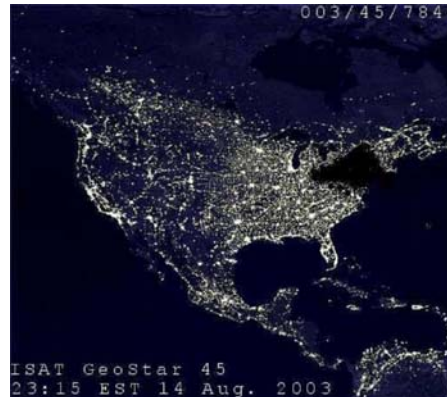


2007



2002

Northeast Blackout



2003

Operating Environment – Natural Hazards



These events either physically impaired the IT/Telecom sector and/or required the government to force industry to manage access and traffic... impacting the ability of this sector to support response and mitigation efforts.

Florida Hurricanes



2004

Greensburg KS Tornado



2007

Hazard Impacts to Communications - 9/11: Commission Report

Chapter 9: Heroism & Horror

Pentagon Response

“Arlington County: After –Action Report’ notes, there were significant problems with both self-dispatching and communications...With respect to communications, the report concludes :
'Almost all aspects of communications continue to be problematic, from initial notification to tactical operations. Cellular telephones were of little value...Radio channels were initially oversaturated...”

World Trade Center Response

“Lack of Coordination among First Responder Agencies. Any attempt to establish a unified command on 9/11 would have been further frustrated by the lack of communications and coordination among responding agencies”

Hazard Impacts to Communications – DC Sniper Task Force: SAFECOM After Action Report

4.1.4 Lack of Interoperability Hindered Search Team Communications:

“On many occasions at incident scenes, officers from various jurisdictions were teamed with each other in the moments following an incident to perform searches for the perpetrators) or evidence within a defined geographic area. In some cases, a lack of interoperable communications between the searching officers hindered officers’ ability to exchange information, request assistance, or provide status updates in a timely manner. “

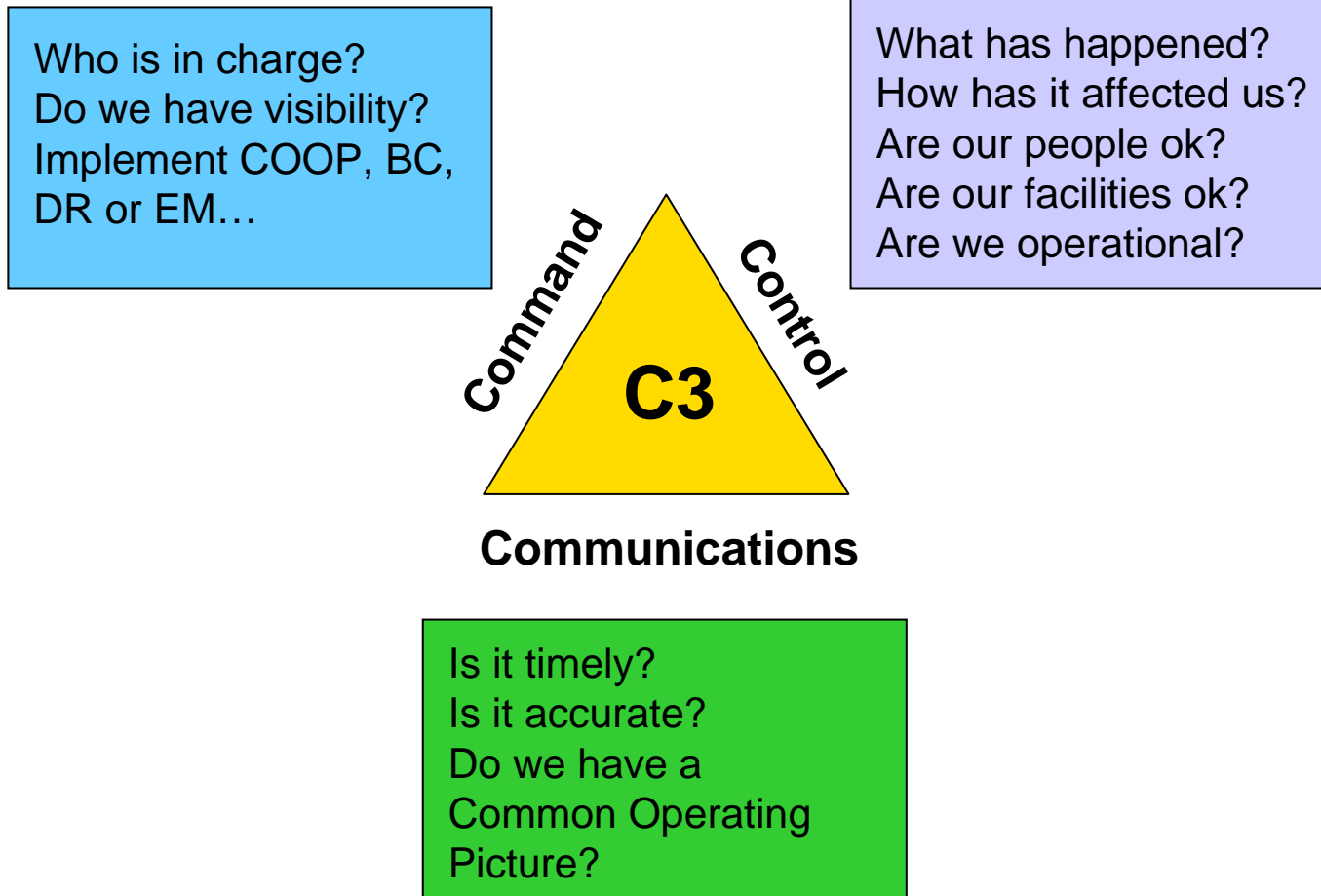
Hazard Impact to Communications - Hurricane Katrina: WH Report on Lessons Learned

Critical Challenge: Communications

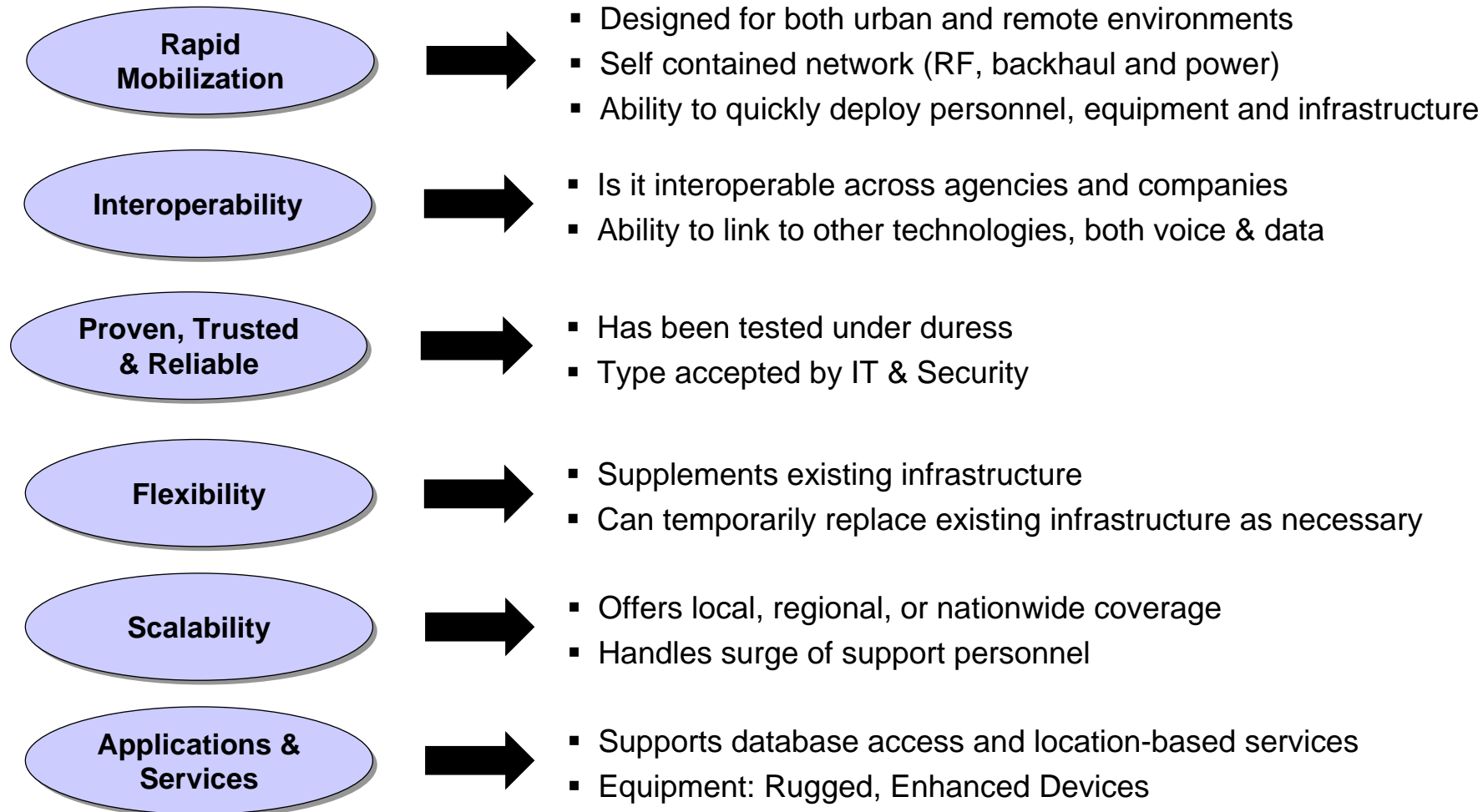
“...the communications challenges across the Gulf Coast region in Hurricane Katrina’s wake were more a problem of basic *operability*, than one of equipment or system *interoperability*... Although Federal, State, and local agencies had communications plans and assets in place, these plans and assets were neither sufficient nor adequately integrated to respond effectively to the disaster.”

COMMUNICATIONS: A CRITICAL COMPONENT TO CONTINUITY MANAGEMENT

Core Requirements to Continuity Management



Communications Continuity Elements...



Communications Continuity: Designing Strategy

Communications-In-Depth – weaves a variety of voice and data technologies to ensure when there is infrastructure failure, there are concentric rings of telecom alternatives

Restoration – wireless voice and data infrastructure can be restored and expanded at a much greater speed

Diversity – wireless voice and data infrastructure can provide service support via terrestrial and satellite (latter is not impacted by terrestrial disasters)

Critical Services – enables continuity operations such as automated employee call-out lists, BC plans distribution & reporting, remote server reset, GPS and video access

Security – there are now wireless devices and programs that provide extremely high levels of information security

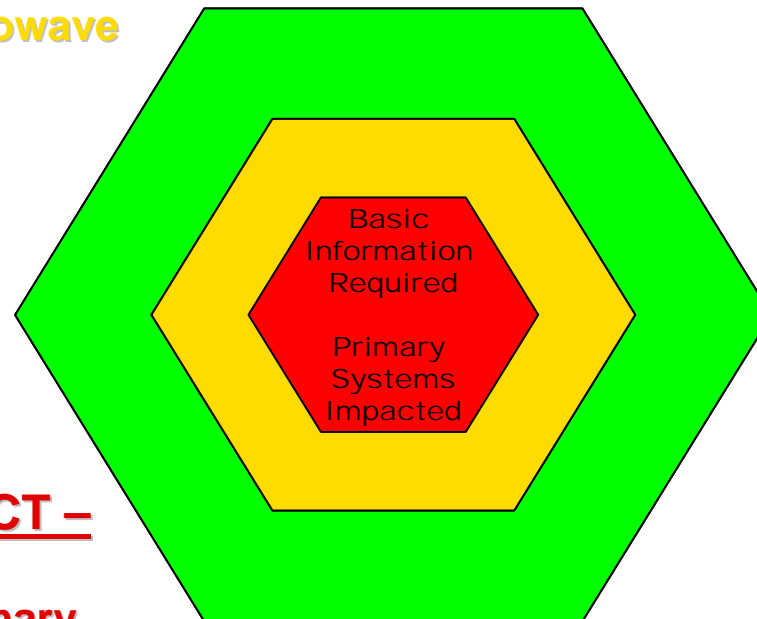
Communications Continuity: Implementation

Communications In-Depth Strategy:

MATCHING THE COMMUNICATIONS TO THE SITUATION

PARTIAL IMPAIRMENT –

Redundant Fiber or Microwave
Hot Data Centers
Alternative PBXing
Virtual Office Systems
Wireless Voice & Data



FULL VISIBILITY –

PBX, Servers,
Dedicated Circuits,
Desk-sets, IVR,
Data Centers,
Etc...Operational

CATASTROPHIC IMPACT –

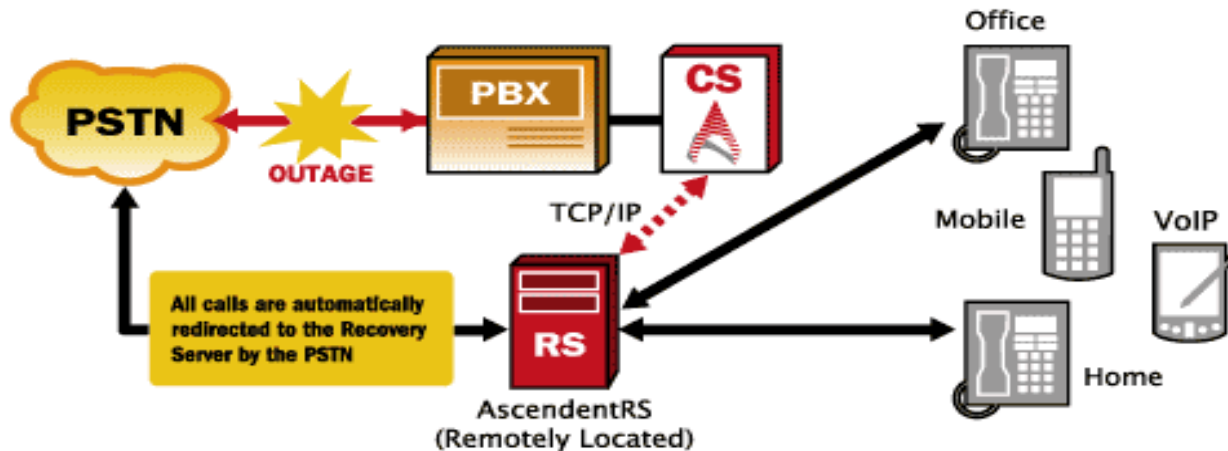
Satellite Backhaul
IP Based Services As Primary
Employee Notification & Location Services
COOP/BC/DR Data Applications
Temporary Communications Infrastructure



Communications Continuity: Alternative PBX

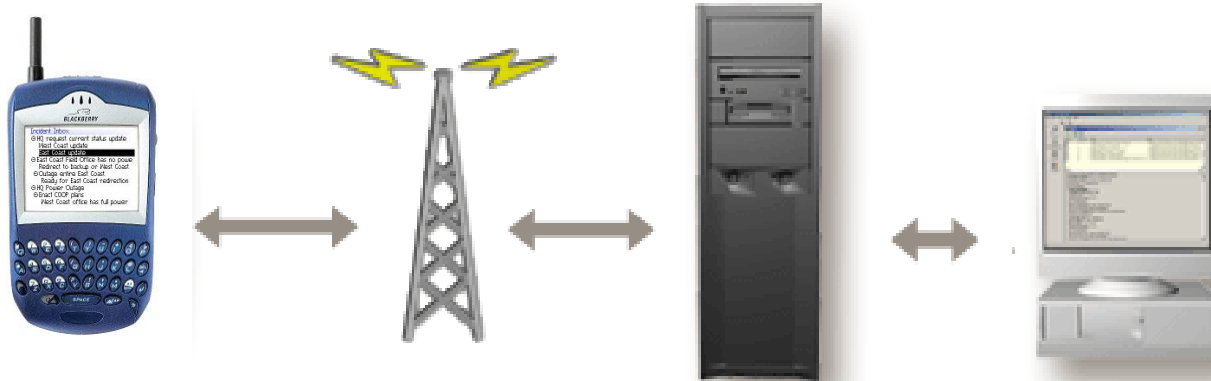


Ascendent CS™ Continuity Function Overview



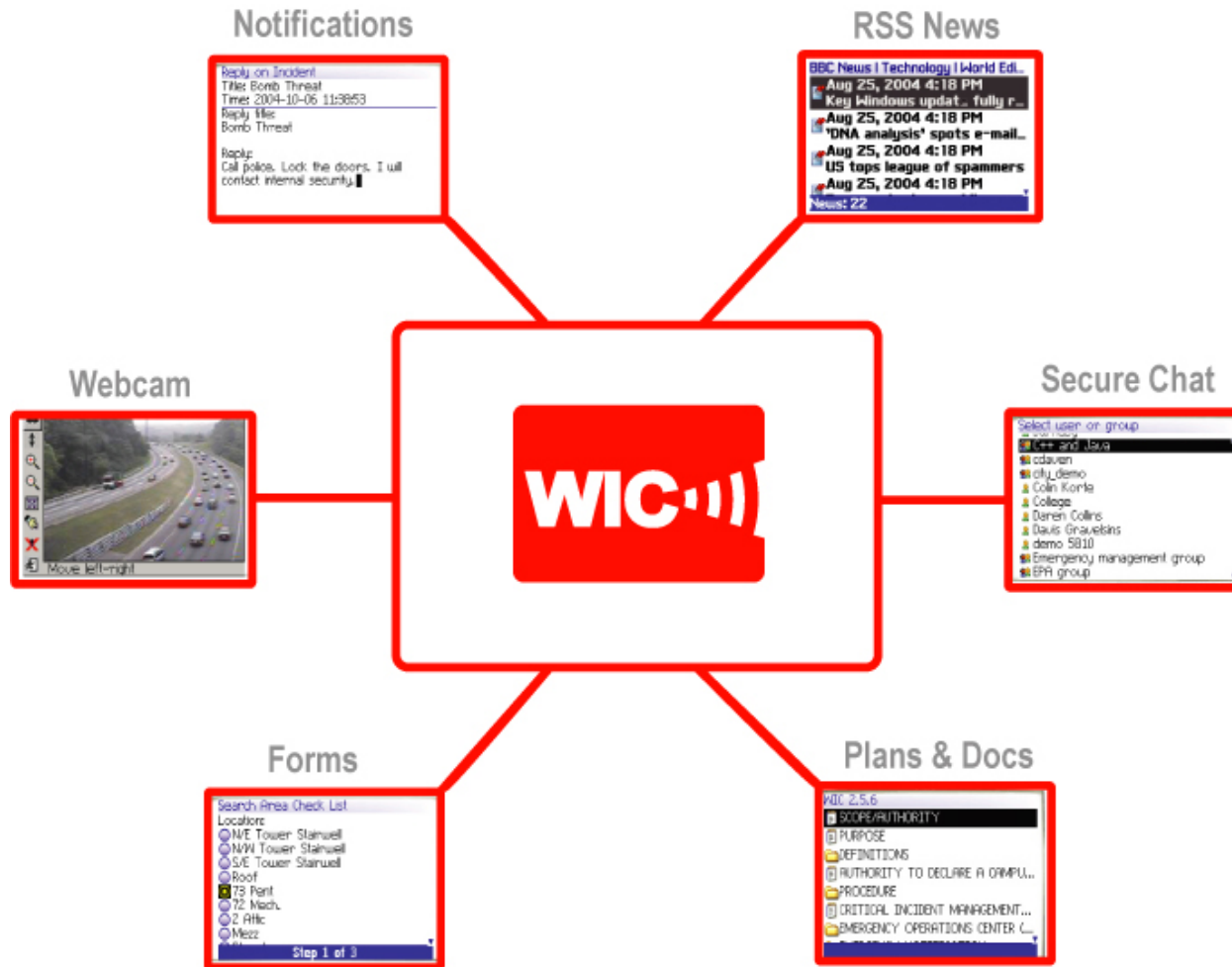
The [AscendentCOG™](#) and [AscendentCS™](#) (in conjunction with their respective servers) extend the reach and functionality of the main communications hub – the Private Branch Exchange (PBX) or Centrex switch - if the system is down or an entire staff has been evacuated or displaced. The AscendentCOG and AscendentCS are designed to perform all functions required for the voice related requirements of the Business Continuity Planning (BCP), and Continuity of Operations (COOP) programs.

Communications Continuity: Wireless Data Tool



Wallace Incident Communicator™ (WIC) enables corporations to securely implement business continuity plans across the enterprise, making business continuity and IT recovery plans, contacts, locations and phone numbers available to users on their wireless handhelds. All updates are done wirelessly, as the information is needed or becomes available. Having immediate access to this information empowers employees at all levels to respond quickly and appropriately to any type of incident.

Communications Continuity: Wireless Data Tool



Communications Continuity: Wireless Data Tools

Regulation Drivers

- CAP v1.0
- NFPA
- 7 year Pin to Pin archiving
- HIPAA
- Sarbanes-Oxley
- EM-XML
- NIST – (US-CERT)
- Bill C-45 (CAN)
- UK Civil Contingencies Bill

Regulated Industries

Financial Services:

ScotiaBank, Sunlife

Government:

PWGSC, MTO, GSA, OSD, all
COOP/COG
Municipal, State, Federal

Transportation:

DEC, Corporate Couriers

Communications Continuity Provides: A Common Operating Picture

Communications Continuity is about timely & effective:

- **Information flowing vertically in an organization (from C-Level Officers to individual employees)**
- **Information flowing horizontally outside an organization to other agencies, companies, customers, suppliers and citizens**
- **Providing a pipe of information that enables management to make mission critical decisions regarding the allocation of personnel and assets**
- **Effective planning, investment and implementation will impact the success or failure of a response to an event**

Contact Information

- **For additional information on Rapid Deployment Solutions provided by Sprint's Emergency Response Team, please contact:**
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Questions?