



Working Group 9: Infrastructure Sharing During Emergencies

Status Update

March 20, 2013

Jay Naillon (T-Mobile), Chair
Eric Panketh, FCC Liaison

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Objectives

Description:

Natural disasters and other hazards can result in the destruction of vital communications assets, leading to disruptions to communications at times when users need them most. In recent years communications providers have explored various methods of sharing infrastructure and assets, such as back-up power assets and in-market roaming agreements, to compensate for the temporary loss of assets. This working group will examine these options and recommend a set of best practices that service providers could use to more rapidly apply infrastructure sharing methods to sustain communications in future emergencies.

Deliverables:

- First Draft of recommendation regarding *Roaming During Disasters Guidelines, March 2014*
- First Draft of remaining recommended best practices, September 2014
- Determine long-term road map beyond 2014 for WG9, December 2014
- Final Recommendations & white paper outlining recommended best practices, December 2014



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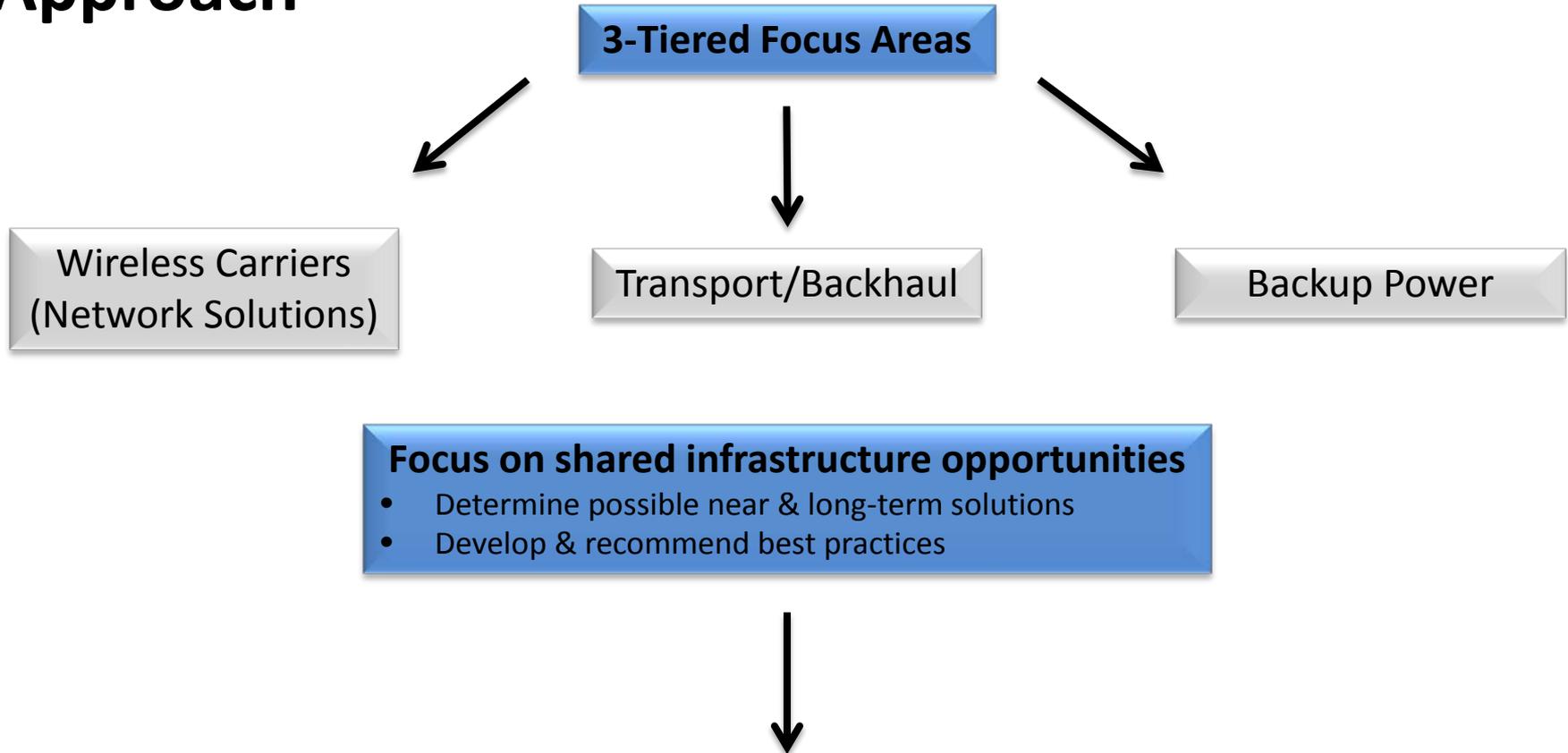
Background

- During large scale natural disasters, communications can be impeded or prevented by the loss of commercial utility power and transport facilities requiring operators to deploy alternate methods such as:
 - Generators, COWS & COLTS
 - Fuel and other logistical support is difficult to manage
 - Resources are limited



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Approach



Where are we now?



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Working Group Focus Areas

Wireless Networks		Backup Power		Transport	
Organization	Name	Organization	Name	Organization	Name
Union Wireless	Eric Woody	Sprint	Richard Zinno	Century Link	Kathryn Condello
ATIS - Ericsson	Ernie Gallo	Cat 5	Cindy Perez	T-Mobile	Joan Vaughn
Ericsson	Gaspar Wosa	Battery Corp	Dick Scott	ATIS - ATT	Rick Griepentrog
FEMA	Jarrett Devine	Commscope	Anil Trehan	Federal Reserve	Wayne Pacine
FSISAC	Denise Anderson	American Tower	Betsy Carlton-Gysan	Larimer Emergency Tel	Ed Roth
ACS	Chao-Ming Lu	Century Link	Mike Cybyske	Federal Bank of NY	Lola Judge
ATT	Kent Bowen	Sunbelt Generators	Jason Thompson	Ericsson	John Schwarz
Verizon Wireless	Chris Oberg	Generac Power System	Todd Dufur	American Tower	Mark Christian
Valrico Ventures	Carroll DeMas	PA PUC	Lois Burns	Cox	Jim Shortal
CTIA	Rick Kemper	ATT	Steve Martin	Consultant	Bob Oenning
Harris County ITC	Robert Cavazos	Crown Castle	Cliff Abbio	Federal Bank of NY	Julia Merette
NSN	Joy Mukherjee	Capitol Broadcasting	Sam Matheny	Goldman Sachs	Alland Sy
Sprint	Kevin Frank	CTIA	Brian Joseph	Goldman Sachs	Steve Schwartz
HHS - Technology	Ingred Caples	Department T&C	Geoffrey Why	US Treasury	Kate Kingberger
Verisign	Eric Osterweil	Pacific Power Rentals	Richard Qualey	Comcast	Lynette Van Someren
		Energysys Delaware	John Kim		
		Foster Fuels	Stephen Tibbs		
		DOE	Alice Lippert		
		American Tower	Jacob Jacobsen		



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Working Group Focus Areas

Wireless Carriers
(Network Solutions)

Roaming During Disasters Guide

Next Steps

1. Solidify proposed NEW Best Practice and move from a “Draft” state.
 - May 9th , 2014
2. Finalize where the document will be hosted and who will be responsible for governing the document going forward
 - May 9th , 2014
 - Presently suggested for ATIS to perform
3. Complete Roaming Matrix and Contact List for each carrier and associated technology.
 - August 8th , 2014



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Working Group Focus Areas

Wireless Carriers
(Network Solutions)

Roaming During Disasters Guide

The Communications Security, Reliability and Interoperability Council IV
Roaming During Disaster Guide

Working Group [IV]
[March, 2014]

4.3 Wireless Roaming Matrix

State	Carrier	Technology/Spectrum					
		GSM	CDMA	EVDO	UMTS	LTE	WiMax
Alabama	AT&T	850, 1900	na	na	850, 1900	700, 1900, AWS	na
	Sprint	na	800, 1900	1900	na	na	2500
	T-Mobile	1900	na	na	1900/AWS	AWS	na
	Verizon	na	850, 1900	850, 1900	na	700, AWS	na
Alaska	Arctic Slope	850	na	na	na	na	na
	AT&T	850, 1900	na	na	850, 1900	700, 1900, AWS	na
	GCI	1900	na	na	1900	na	na
	Sprint	1900	na	na	na	na	na
American Samoa	Verizon	na	na	na	na	700, AWS	na
	AT&T	850, 1900	na	na	850, 1900	700, 1900, AWS	na
	CI AZ	850, 1900	na	na	na	na	na
	Commnet	850, 1900	na	na	na	na	na
Arizona	Sprint	na	800, 1900	1900	na	na	2500
	T-Mobile	1900	na	na	1900/AWS	AWS	na
	Verizon	na	850, 1900	850, 1900	na	700, AWS	na
	AT&T	850, 1900	na	na	850, 1900	700, 1900, AWS	na
Arkansas	Sprint	na	800, 1900	1900	na	na	2500
	T-Mobile	1900	na	na	1900/AWS	AWS	na
	Verizon	na	850, 1900	850, 1900	na	700, AWS	na
	AT&T	850, 1900	na	na	850, 1900	700, 1900, AWS	na
California	MetroPCS	na	na	na	na	na	na
	Sprint	na	800, 1900	1900	na	2500	2500
	T-Mobile	1900	na	na	1900/AWS	AWS	na
	Verizon	na	850, 1900	850, 1900	na	700, AWS	na



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Working Group Focus Areas

Transport/Backhaul

Short-Term Focus Areas

- Last-Mile Vulnerability Investigation
- Microwave Possibilities
 - Licensed / Unlicensed
 - Third Party Leased
 - Third Party Install On-demand
 - List of service providers

Long-Term Focus Areas

- Shared Backhaul Solutions
 - Microwave
 - Dark Fiber

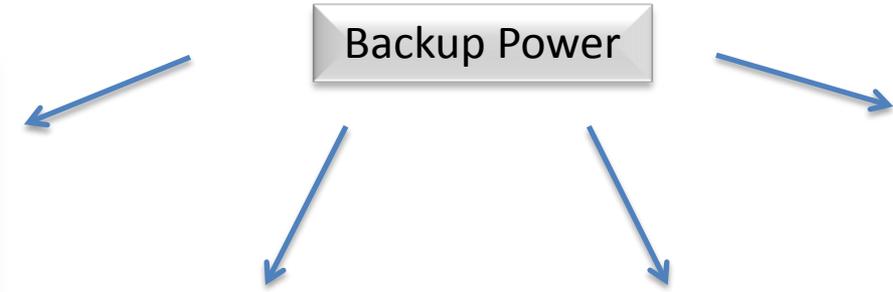
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Working Group Focus Areas

Shared Generator Specifications
Leader: Steve Martin

Focus
Technical Specifications

Deliverables
Technical engineering specifications on sharing backup generators.



Priority Sites
Leader: Richard Zinno

Focus
Priority Sites

Deliverables
Define types of sites and landlord shared sites.

Shared Resources
Leader: Cindy Perez
Members:
Kyle Penn
Ingrid Caples
John Kemp
Ernie Gallo
Jake Jacobsen
Michael Sims

Focus
Fueling, Portables, Staging Yards

Deliverables
Definite potential staging location in relation to portables.

- Figure out how to get priority access to fuel terminals
- Best practices for small cells

Requirements, Regulations, Barriers
Leader: Anil Trehan

Focus
Collect documentation on issues creating pushback on a National, State & Local level as it pertains to requirements.

Deliverables
Prepare a list of requirements:

- What's needed for backup power so officials will know what we're proposing.
- Identify requirements & capacity so that regulators know & understand what is needed.
- Create a 1-line diagram as an example of how it would look from a learning perspective



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Subcommittee Schedules & Next Steps

- **Subcommittee Schedules**
 - Subcommittee meetings meet weekly
 - Full-team meeting 1st Friday of each month
 - Backup Power Subcommittee meeting in-person next week
- **March through September 2014**
 - Focus on recommendations for Best Practices:
 - Build out Roaming Guide
 - Transport Vulnerability
 - Provide updates to steering committee and CSRIC council
- **October – December 2014**
 - Finalize documentation
 - Determine path beyond 2014
 - Readout to CSRIC Council



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Thank You!

Questions?

