



# **Working Group 9: Infrastructure Sharing During Emergencies**

## **Status Update**

December 4<sup>th</sup>, 2013

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

## CSRIC: Working Group 9

# 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.

### Deliverable(s):

- First Draft of recommended best practices for short-term focus items, March 2014
- First Draft of recommended best practices for long-term focus items, September 2014
- Determine long-term road map beyond 2014 for WG9, December 2014
- Final Recommendations and white paper outlining recommended best practices, December 2014



## CSRIC: Working Group 9 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

- Divide Working Group into three focus areas:
  - Wireless Carriers (Network Solutions)
  - Backhaul/Transport
  - Backup Power
- Focus on shared infrastructure opportunities:
  - Determine possible near and long term solutions
  - Develop and recommended best practices
- 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 Systems	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 Networks	Backup Power	Transport
Short-term Focus Areas	Short-term Focus Areas	Short-term Focus Areas
Roaming During Disasters	Site Prioritization for Hardening Focus	Last-Mile Vulnerability Investigation
Resource Sharing - Best Practices	Mimimum Coverage Target	Microwave Possibilities
	Critical facilities (Hospitals, Shelters, etc.)	Licensed / Unlicensed
	Master list of mutually desired sites to harden	Third Party Leased
		Third Party Install On-demand
		List of service providers
Long-term Focus Areas	Long-term Focus Areas	Long-term Focus Areas
Interoperability Standards	Alternative Power Source Investigation	Shared Backhaul Solutions
		Microwave
		Dark Fiber



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Working Group Focus Areas

## Roaming During Disasters Guide



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CSRIC IV Working Group 9

Infrastructure Sharing During Emergencies

Roaming During Disasters

November 21, 2013



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## Working Group Focus Areas

### Roaming During Disasters Guide

#### Roaming Matrix

Region	Spectrum		Carrier	PCS 1900 MHz					
	State	County		GSM	CDMA	UMTS	LTE	WiMax	EVDO
Northeast	New York	Long Island	AT&T	*					
			Sprint						
			T-Mobile	*		*			
			Verizon		*				
		Queens	AT&T	*					
			Sprint					*	*
			T-Mobile	*		*			
			Verizon		*				
		Bronx	AT&T	*					
			Sprint					*	*
			T-Mobile	*		*			
			Verizon		*				
	Statens Island	AT&T	*						
		Sprint					*	*	
		T-Mobile	*		*				
		Verizon		*					
	New Jersey	ABC	AT&T	*				*	*
			Sprint					*	*
			T-Mobile	*		*			
			Verizon		*				
XYZ		AT&T	*					*	*
		Sprint						*	*
		T-Mobile	*		*				
		Verizon		*					

#### Contacts

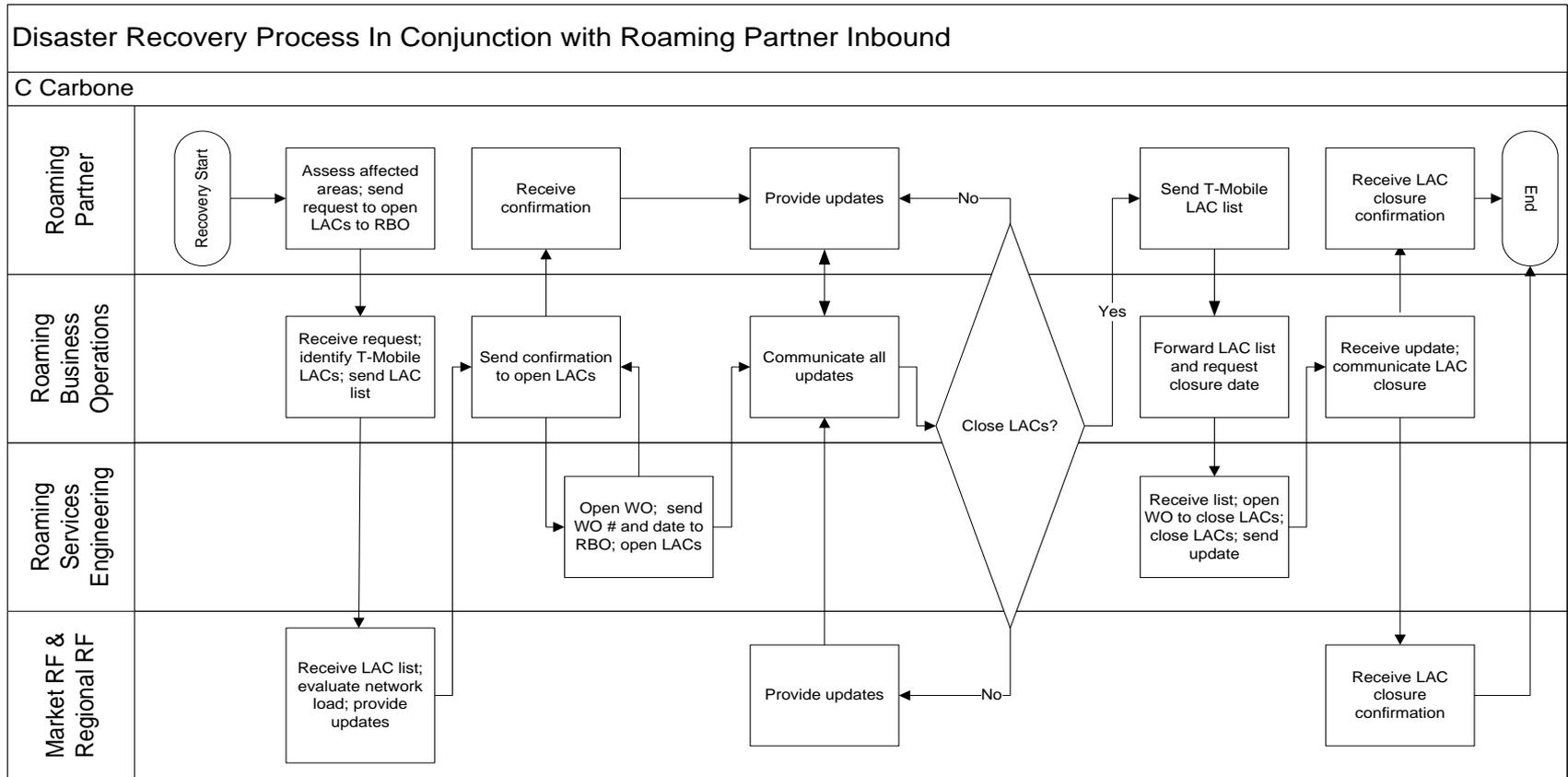
Carrier	Name	Title	Mobile	Office	Email	NOC/Emergency
T-Mobile	Joan Vaughn	Senior Manager - Emergency Management	405-829-0172	405-999-4136	<a href="mailto:joan.v Vaughn@t-mobile.com">joan.v Vaughn@t-mobile.com</a>	1-888-962-4662
	Jay Halton	Director National Ops Planning & Support	405-829-9953	405-999-9483	<a href="mailto:jay.halton@t-mobile.com">jay.halton@t-mobile.com</a>	1-888-962-4662
AT&T	TBO	TBO	TBO	TBO	TBO	1-888-962-4662
	TBO	TBO	TBO	TBO	TBO	1-888-962-4662
Sprint	TBO	TBO	TBO	TBO	TBO	1-888-962-4662
	TBO	TBO	TBO	TBO	TBO	1-888-962-4662
Verizon	TBO	TBO	TBO	TBO	TBO	1-888-962-4662
	TBO	TBO	TBO	TBO	TBO	1-888-962-4662



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## Working Group Focus Areas

### Roaming During Disasters Guide - Process



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# Subcommittee Schedules & Next Steps

- Subcommittee Schedules
  - Subcommittees meeting weekly – Full-team meeting first Friday of the month
  - Backup Power Subcommittee meeting in-person next week
- January - March 2014:
  - Focus on Short-term deliverables:
    - Build out Roaming Guide
    - Work with carriers on developing master list of desired sites
    - Transport Vulnerability
  - Provide updates to steering committee and CSRIC council



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### Next Steps (continued)

- April – September 2014:
  - Focus on long-term deliverables:
    - Begin developing standards requirements and determine bodies to reach out to
    - Compare master site list to available generators/backup resources and new multicarrier opportunities
    - Investigate alternative backup power solutions
    - Investigate transport vulnerability opportunities and shared transport possibilities.
  - 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?

