



# Federal Communications Commission

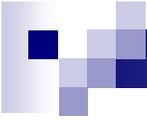
## Communications Security, Reliability and Interoperability Council

*Planning for NS/EP Next Generation Priority Services during Pandemic Events  
Final Report Read Out – December 13, 2010*

*Co-Chairs, Working Group 7*

*Ingrid Caples – U.S. Department of Health and Human Services*

*Jerry Wade – Sprint Nextel*



# Agenda

## Final Report Readout to CSRIC Members

- Introduction
  - WG7 Members
- WG7 Description
- WG7 Assigned Tasks
- Preparing and finalizing the report
  - Report Assumptions
  - Vetting amongst stakeholders
  - Status of input received by CSRIC members
- Report Structure
- Focus Areas
  - Task Deliverables
    - Service Requirements – Appendix A
    - Implementation Strategy – Appendix B
  - Findings and Key Recommendations
- Questions

# Working Group 7 – Members

Name	Company	Name	Company
Ingrid Caples (Co-Chair)	U.S. Department of Health & Human Services	Nick Mangiardi	Sprint Nextel
Jerry Wade (Co-Chair)	Sprint Nextel	Ray Barnes	International Assoc. of Fire Chiefs,
Brian Allen	Time Warner	Rick Kemper	Cellular Telephone Industries Association (CTIA)
Chris Oberg	Verizon Wireless	Robert Turner	Satellite Industry Association / Spacenet Integrated Government Solutions, Inc.
Darrell Lingk	Qwest	Sharon Counterman	National Emergency Number Association (NENA) / Greater Harris County 911 Emergency Network
Frank Suraci	Department of Homeland Security (DHS) / National Communications System (NCS)	Steve Waken	AT&T
Jane Kelly	Federal Communications Commission (FCC)	Veronica Lancaster	Alliance for Telecommunications Industry Solutions
Jim Runyon	Alcatel-Lucent	Viqar Shaikh	Telcordia Technologies
John Coleman	Department of Public Safety, New York State	Walt Magnussen	NENA / Texas A&M University
Martin Dolly	AT&T	Wayne Pacine	Federal Reserve Board
Nate Wilcox	MicroDATA		



## WG7 Description

In the event of a major outbreak of infectious disease there will be a tendency for large groups of people to telecommute to avoid clustering in common locations. This **migration from enterprise to residence** will be difficult to plan for and may lead to congestion in communications networks. The national security and emergency preparedness (NS/EP) community has access to effective priority communications services that enable members to complete emergency calls even during times when networks have sustained considerable damage, and, thereby have limited capacity, and times of extreme congestion.

The primary systems are the government emergency telecommunications service (GETS) and wireless priority service (WPS). These systems were designed to operate with circuit switched networks. As the networks evolve toward internet protocol (IP) networks, and the NS/EP community migrates to these networks and services, fewer and fewer members of the NS/EP community will be able to rely on these priority services to complete their essential communications. As a result, it is **incumbent that network operators develop NS/EP priority services for the next generation IP-based networks.**



# WG7 Assigned Tasks

- To help with this development, the FCC assigned the following tasks to the CSRIC:
  - (1) develop a NGN IP priority service requirements document that specifies the order of magnitude of users, types of services covered (e.g., voice, data, video, others), number of levels of priority, processes for authorizing priority access, performance standards/metrics, and expected costs; and
  - (2) develop a priority services implementation strategy (e.g., which types of service should be rolled out first)



# Preparing and Finalizing Report

- Assumptions

- Previous referenced reports reviewed for this effort were considered valid
- NCS remains the execution authority for the NS/EP NGN Priority Services program; FCC provides the legal and regulatory framework for the commercial carriers
- Recommendations will be implemented
- The Stafford Act could be invoked during a long-term pandemic

- **Vetting amongst CSRIC members/sponsor organizations, and other stakeholders**

- WG7 vetting process included routine vetting throughout the development of the report with stakeholders



# Preparing and Finalizing Report

- Status of input received by CSRIC members
  - No direct comments submitted
  - WG7 members submitted on-behalf of CSRIC/sponsor organizations
    - Three (3) changes that added or slightly modified existing text
    - Various editorial changes to include
      - Use of PSTN vs. PSN throughout document
      - Deleted term “shelter-in-place” in two places and replaced one instance with “other form of social distancing”
      - Page 9, 3.2. Add "Pandemic and" to read ". . .under the Pandemic and All Hazards Preparedness Act (PAHPA). . ."
      - Page 10, 4.1 and Appendix A-1. Change [OPM 1] to [HHS 1]
      - Foot note reference to the 2009 H1N1 influenza since the [HHS 1] report was created in 2005
      - Add website references

# Preparing and Finalizing Report

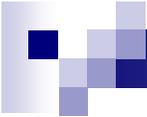
- Status of input received by CSRIC members -

Section	Accepted by WG	Action To be Taken
3.2 (page 9)	Yes	<p>First paragraph now reads;</p> <p>The primary purpose of the report is to provide recommendations that will lead to the successful use of NS/EP Next Generation Network Priority Services when required by the NS/EP community; and to facilitate the availability of NGN Priority services to the NS/EP community irrespective of the severity of an event but within recognized limitations.</p>
3.2 (page 9)	Yes	<p>Delete second to last sentence in last paragraph of section. Paragraph now reads;</p> <p>The Department of Health and Human Services under the Pandemic and All Hazards Preparedness Act (PAHPA) and NRF serves as the lead Federal entity for Emergency Support Function 8 (ESF#8). These authorities provides the mechanism for coordinated Federal assistance to supplement State, tribal, and local resources in response to a public health and/or other disaster related incident requiring a coordinated Federal response. References to information on NRF, PAHPA, and public health emergencies can be found in Appendix E.</p>

# Preparing and Finalizing Report

- Status of input received by CSRIC members -

Section	Accepted by WG	Action To be Taken
5.2.2 (page 21)	Yes	<p>Add the following after paragraphs under “Legality of Communications Services for NS/EP Users”</p> <p><b>Statutory Protections for Providers of Priority Communications for NS/EP Users</b></p> <p>Absent some statutory protections from liability, providers of mobile data services are likely to be reluctant to offer NGN priority services for NS/EP users, even if it would not be unlawful to do so. This is due to the likelihood that, in localized incidents, the use of priority services by NS/EP users could result in blocked calls or data sessions for non-priority users. Accordingly, in addition to an FCC ruling on the legality of providing IP-based on the NGN for NS/EP purposes, the WG7 team believes that the FCC and the NS/EP community should pursue statutory liability protections for carriers who agree to provide such NGN priority services to NS/EP users.</p>



# Report Structure

## **1. Results in Brief**

1.1 Executive Summary

## **2. Introduction**

2.1 CSRIC Structure

2.2 Working Group 7 Team Members

2.2.1 Sub-Group Structure

## **3. Objective, Scope, and Methodology**

3.1 Objective

3.2 Scope

3.3 Methodology

## **4. Background**

4.1 Pandemic

4.2 Legacy Priority Services

4.3 Network Evolution

4.4 NS/EP NGN Priority Services

4.4.1 Functional Scope

4.4.2 Architectural Scope

4.4.3 Services Scope

## **5. Assumptions, Analysis, Findings and Recommendations**

5.1 Assumptions

5.2 Analysis

5.2.1 Priority Communications  
Requirements during a Pandemic Event

5.2.2 Gap Analysis

5.3 Findings

5.4 Recommendations

## **6. Conclusions**

## **7. Appendices**

Appendix A – NGN IP Priority Services  
Requirements (Task 1 Deliverable)

Appendix B – NGN IP Implementation Strategy  
(Task 2 Deliverable)

Appendix C – Standards

Appendix D – Acronyms and Key Terms

Appendix E – References

Appendix F – 2002 Recommendations Report  
NS/EP Network Convergence



## Focus Area – Task Deliverables

- Service Requirements – Appendix A
  - A.1 Impacts of a Pandemic
  - A.2 Existing NCS Programs
  - A.3 Order of Magnitude of Users
  - A.4 Types of Services Covered
  - A.5 Process for Authorizing Priority Access
  
- Implementation Strategy – Appendix B
  - Strategy
  - Implementation Costs
  
- Rough Order of Magnitude Costs 5.2.2 (pages 29 and 30)



## Focus Area – Findings

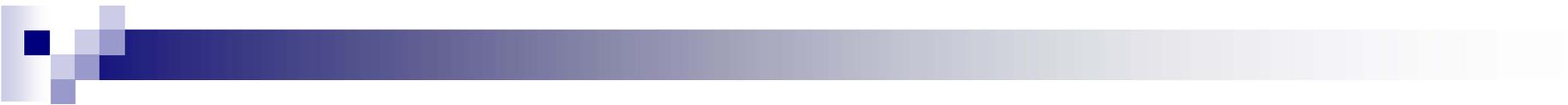
- Communication traffic will increase as pandemic begins and will ramp up nationwide as pandemic spreads
- Traffic distribution will change with residential traffic increasing as traffic shifts from the enterprise due to telecommuting
- Performance Service Level Agreements do not legally apply during “Acts of God” and “Force Majeure,”
  - NS/EP NGN Priority Services are not assured communications but a high probability of completion
  - Carriers will provide performance reports (including metrics and event analyses) of NS/EP Operations, Administration, Maintenance and Provisioning (OAMP) processes during the event
    - Real-time event analysis may be hindered due to staff shortages and access to data during the event



## Focus Area – Key Recommendations

The FCC should:

- Initiate rulemaking proceeding to consider legal framework for priority services in an IP-based NGN environment
  - FCC must rule that IP priority communications associated with NS/EP NGN Priority Voice, Video and Data Services are legal across all NGN media
  - FCC should consider legal and policy issues (including its own jurisdiction) raised by the potential provision of emergency voice, video and data services in the range of NGN media
  
- Review TSP authorization and determine if updates to TSP authorization are required for broadband



## Focus Area – Key Recommendations, Continued

The FCC should:

- Clarify in rules the White House criteria to qualify for NS/EP priority service applied to Critical Infrastructure employees with mission-critical responsibilities
  - To support the expanded user base identified in the National Security Telecommunications Advisory Committee (NSTAC) and Partnership for Critical Infrastructure Security (PCIS) reports
  - Level 4 and Level 5 priorities should be changed from “managing critical infrastructure activities” to “performing mandatory critical infrastructure activities”



## Focus Area – Key Recommendations, Continued

The FCC should continue support of NS/EP priority communications:

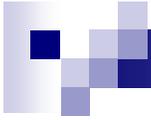
- Work with the Executive and Legislative branches to heighten awareness of the need for funding to support:
  - Extension of GETS / WPS to support a significantly-expanded user population
  - Transition of GETS / WPS from circuit-switched voice to NGN IP-based voice, video and data to include
    - Maintain legacy circuit-switched priority capabilities until 2020, and
    - Develop and maintain new NS/EP NGN priority capabilities as well as development of priority communications-related technical standards within the various standards bodies



## Focus Area – Key Recommendations, Continued

The FCC should continue to provide legal and regulatory guidance:

- To the NCS and the communications industry
  - to ensure that they implement and deploy NS/EP NGN Priority Services as quickly as possible given available funding
  
- To the NCS and sponsoring organizations
  - to ensure that they enroll and train as many NS/EP and mission-critical infrastructure personnel on the use of NS/EP NGN Priority Services



■ QUESTIONS ???