

Working Group #1: NG911

Status Update

December 4, 2013

Laurie Flaherty (National 911 Program), Co-Chair Brian Fontes (National Emergency Number Association), Co-Chair

Description: Text-to-911

In March 2013, ATIS/TIA adopted the Joint ATIS/TIA Native SMS to 911 Requirements and Architecture Specification defining the requirements, architecture, and procedures for text messaging to 911 emergency services using native wireless operator texting capabilities for the existing generation and Next Generation 911 PSAPs. The standard, however, does not address the following area, which may be the subject of the ongoing text-to-911 rulemaking.

Deliverable(s):

1. Location Determination: The ATIS/TIA standard specifies the provision of cell site and sector location information. The Working Group will study and report on the technical feasibility for wireless carriers to include E911 Phase 2 location accuracy and information in texts sent to 911 and make recommendations for including enhanced location information in texts to 911. (Deadline: March 2014)



Description: Text-to-911

In March 2013, ATIS and TIA released the Joint Native SMS-to-911 Requirements and Architecture Specification. The standard assumes that a PSAP will designate the text to 911 delivery method to the PSAP, including type of delivery method, or an alternate PSAP (and method) that will accept messages on behalf of the PSAP, or the PSAP will indicate that text-to-911 is not supported at all. The ATIS/TIA standard does not provide a mechanism for supporting this functionality and indicates that it is an area of future study. In the May 2013 Report & Order on Text-to-911 establishing bounce-back requirements on covered text providers, the FCC requires wireless carriers to provide a mechanism for PSAPs to notify the carrier to temporarily suspend text-to-911 service and to restart text-to-911.

Deliverable(s):

2. PSAP Requests for Service: The Working Group will recommend best practices, including testing and trialing, operational procedures, and security requirements that wireless carriers, Public Safety Answering Points (PSAPs), and third party service providers should follow in provisioning PSAP requests for text-to-911 service. (Deadline: March 2014)

Description: Location Accuracy and Testing for Voice-over-LTE Networks

Current FCC location accuracy requirements under 20.18(h) permit network-based carriers to begin "blending" their GPS handset-based location data with their network-based data at the different benchmarks between January 2012 and January 2019.

Deliverable(s):

Based on the CSRIC III recommendations in the WG3 March 2012 Report for certain key performance indicators (KPIs) and the different types of empirical testing as part of the recommended maintenance testing every two years, the Working Group will examine whether those recommendations still apply for network-based carriers reconfiguring to Voice over LTE (VoLTE) platforms. They will examine any necessary changes in the testing recommendations and recommend cost efficient measures to meet the current location accuracy parameters in 20.18. Also, the Working Group will examine the capabilities of VoLTE reconfigured networks to provide enhanced location capabilities and consider methodologies to resolve the differences in opinions on location performance and "yield" referred to in Part 7 of the March 2012 Report.

(Deadline: December 2014)

Description: Specification for Indoor Location Accuracy Test Bed

In its Indoor Location Test Bed Report, CSRIC III WG3 recommended that the Commission charter future stages of the test bed under the auspices of future CSRIC working groups in order to continue the assessment of current and evolving location technologies. CSRIC III WG3 found that "several cycles of testing, at regular intervals, are needed to support the rate of technology development" and that "a test bed management structure with contractual authority that extends beyond [CSRIC] cycles will encourage ongoing technology development."

Deliverable(s):

The Working Group, therefore, will examine the requirements to establish a permanent entity to design, develop, and manage an ongoing public test bed for indoor location technologies that can provide the FCC with regular comprehensive, unbiased and actionable data on the efficacy of location technologies. The Working Group will consider chartering requirements, including prerequisites for impartial test bed administration and maintenance of data confidentiality; types of entities that could assume the role as test bed administrators; technical requirements; scope and scale of necessary facilities and locations; permanent or contracted human resources to manage the test bed; start-up and ongoing cost requirements to maintain the test bed on an ongoing basis; and other considerations necessary to establishing an independent testing administrator. (Deadline: June 2014)

WG#1 Members

Full Working Group: 62 Members

Subgroup 1: (37) Text to 911

Subgroup 2: (26) Location Accuracy and Testing for Voice-over-LTE Networks

Subgroup 3: (27) Specification for Indoor Location Accuracy Test Bed

Members may join more than 1 subgroup.

Members represent:

- Carriers
- Public Safety/911
- Local/State/Federal Government
- National Professional Organizations for carriers and public safety
- Location Information Technology Companies
- Public Safety Consultant Companies



Background

CSRIC III, Working Group 3

- "The Working Group shall explore and make recommendations on methodologies for leveraging commercial location-based services for 9-1-1 location determination and provide recommendations on the feasibility or appropriateness for the Commission to adopt operational benchmarks that will allow consumers to evaluate carriers' ability to provide accurate location information."
- The diversity of location technologies reviewed by WG 3 confirmed that continual advances are being made in the field. The work group recommended and established a Test Bed trial and evaluated three technologies.
- CSRIC III WG3 found that "several cycles of testing, at regular intervals, are needed to support the rate of technology development" and that "a test bed management structure with contractual authority that extends beyond [CSRIC] cycles will encourage ongoing technology development."



WG#1 Status

- WG#1 has assembled a team of 62 members, representing diverse interests, with subject matter expertise to accomplish the CSRIC IV charge.
- WG#1 has been divided into 3 subgroups. Each is chaired by a member who has volunteered to serve in that capacity.
- Because subtask #1 has two tasks, and many members who wish to participate in both tasks, this subgroup was further divided into 2 groups with separate chairs, who agreed to weekly conference calls that alternate between the 2 tasks.
- 2 of the 3 subgroups have conducted a kickoff conference call with its working group members to organize its efforts, and begin the work of completing their task.

WG#1 Approach

- WG#1 will utilize the following to accomplish their tasks:
 - –Use of case studies
 - -SME discussions
 - -Conference calls
 - –No in-person meetings are planned at this time



WG#1 Schedule

- Each subgroup has established its own schedule of conference calls, with its task and deadline in mind.
- Subgroup chairs also participate with WG#1 Co-Chairs in monthly conference call to coordinate efforts and share experiences.
- Co-Chairs participate in monthly Steering Committee calls
- The deadlines for delivery of Draft Final WG#1 Report(s) have been established, working backwards from quarterly CSRIC meeting dates.
- Final WG#1 Report(s): March, June, December



Next Steps

- Continue to refine WG#1 membership roster
- Execute work plan(s) to accomplish the CSRIC IV charge, taking advantage of WG#1 members' subject matter expertise
- Continue weekly, bi-weekly, and monthly conference calls
- Provide periodic status updates to Steering Committee and Council

