



OREGON'S NEXT GENERATION 9-1-1 PROJECT

Request for Information
Update and Technology Review



AGENDA

- WHY AN RFI
- DEVELOPING AN RFI
- OREGON'S RFI
- FORWARD TO RFP



WHY AN RFI?

- ISSUE HAS COMPLEXITY
- NEW TECHNOLOGIES
- EDUCATION
- TIMELINES
- COST
- REDUCTION OF RISK FOR RFP



DEVELOPING AN RFI

- CLARITY OF MISSION
- ISSUES COMMON TO RFP
- NON-BINDING FACT
- VENDOR OPPORTUNITY



OREGON'S NG9-1-1 RFI

- DATES
- CONTACTS
- ELEMENTS
- PRICING



OREGON'S NG9-1-1 RFI DATES

July 23, 2012	RFI Published
August 24, 2012	Deadline Submission of Meeting Request
September 5, 2012	Submission Deadline
September 10-14, 2012	Week Held for Meetings



OREGON'S NG9-1-1 RFI CONTACTS

Administrative/General Questions;

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OREGON'S NG9-1-1 RFI ELEMENTS STANDARDS

Vendor's should be familiar with the following current NENA standards

- 75-001 v1 - NG Security
- 04-002 v4 - PSAP Master Clock
- 04-004 v1 - PSAP Intelligent Workstation
- 04-502 v1 - CPE Site Characteristics
- 04-503 v1 - PSAP Security
- 71-001 v1 - NG9-1-1 Additional Data (when it becomes available)
- 57-750 v1 - NG9-1-1 System & PSAP Operational Features & Capabilities
- 77-501 v1 - NG9-1-1 Transition Plan
- 53-001 v1 - PSAP Disaster-Contingency Plans
- 53-503 v1 - PSAP Survivability
- 53-507 v1 - Virtual PSAP Management
- 54-750 v1 - HMI & PSAP Display
- 08-001 v2 - Interim VoIP Architecture - i2
- 08-506 v1 - Emergency Services IP Network Design
- 73-501 v1 - Non-Voice Centric Emergency Services



OREGON'S NG9-1-1 RFI ELEMENTS STANDARDS

Vendor's should be familiar with the following ATIS standards

- ATIS-0500019.2010 - Request for Assistance Interface (RFAI) Specification
- ATIS-0500017: Considerations for an Emergency Services Next Generation Network (ES-NGN)
- ATIS-0500008: Emergency Services Network Interfaces (ESNI) Framework
- ATIS-0500007.2008: Emergency Information Services Interface (EISI) Implemented with Web Services
- ATIS-0500005: Standard Wireless Text Message Case Matrix
- ATIS-0500002.2008: Emergency Services Messaging Interface (ESMI)



OREGON'S NG9-1-1 RFI ELEMENTS

OTHER STANDARDS BODIES

- APCO
- IETF
- FCC
- TIA (especially 942 – Data Centers)
- IEEE
- ANSI
- IJIS
- URISA
- UPTIME INSTITUTE



OREGON'S NG9-1-1 RFI

FUNCTIONAL ELEMENTS

- Legacy Gateway (LG)
- Legacy Network Gateway (LNG)
- Legacy PSAP Gateway (LPG)
- Border Control Function (BCF)
- Event Recording (ER)
- Location Information Server (LIS)
- DLR Recorders (payload recording)
- Emergency Call Routing Function (ECRF)
- Emergency Services Routing Proxy (ESRP)
- Location Validation Function (LVF)
- Rules Based Routing Proxy
- Customer Premises Equipment (CPE)
- Data Centers
- PSAP Demarcation Device
- Network (ESInet)
- Scalability



OREGON'S NG9-1-1 RFI

FUNCTIONAL ELEMENTS - GATEWAYS

A **GATEWAY** is an *internetworking* system capable of joining together two networks that use different base protocols. A network gateway can be implemented completely in software, completely in hardware, or as a combination of both.



LOCATION: VARIOUS
ELEMENT: NETWORK

OREGON'S NG9-1-1 RFI

FUNCTIONAL ELEMENTS - BCF

The **Border Control Function** provides a secure entry into the ESInet for emergency calls presented to the network. The BCF incorporates firewall, admission control, and may include anchoring of session and media as well as other security mechanisms to prevent deliberate, malicious attacks on PSAPs or other entities connected to the ESInet.



LOCATION: ENTRY TO ESInet
ELEMENT: NETWORK



OREGON'S NG9-1-1 RFI FUNCTIONAL ELEMENTS - EVENT RECORDER

An **EVENT RECORDER** records information about the call or payload. This includes, but not limited to, hold times, where a payload entered the NG9-1-1 system, system transit times, how long it took to answer a payload or call and other timings not associated with DLR recording.



LOCATION: ESInet
ELEMENT: APPLICATIONS AND
APPLIANCES



OREGON'S NG9-1-1 RFI

FUNCTIONAL ELEMENTS - LIS

The **Location Information Server** is a device that provides locations of endpoints in the ESInet. A LIS can provide Location-by-Reference, or Location-by-Value in geo or civic forms.



LOCATION: DATA CENTER
ELEMENT: APPLICATIONS AND
APPLIANCES



OREGON'S NG9-1-1 RFI

FUNCTIONAL ELEMENTS - DIGITAL LOGGING RECORDER

DIGITAL LOGGING RECORDERS perform a function equivalent to today's logging recorders with the exception they are designed to record all payloads delivered by the ESInet



LOCATION: DATA CENTER OR PSAP
ELEMENT: APPLICATIONS AND
APPLIANCES



OREGON'S NG9-1-1 RFI

FUNCTIONAL ELEMENTS - ECRF

The **Emergency Call Routing Function** is a functional element in an ESInet which is a LoST protocol server where location information (either civic address or geo-coordinates) and a Service URN serves as input to a mapping function that returns a URI used to route an emergency call toward the appropriate PSAP.



LOCATION: DATA CENTER
ELEMENT: APPLICATIONS AND
APPLIANCES



OREGON'S NG9-1-1 RFI

FUNCTIONAL ELEMENTS - ESRP

The **Emergency Service Routing Proxy** is essential for direct call delivery to an appropriate PSAP based upon location and routing rules. It is essentially the last stop before the payload is delivered to the PSAP.



LOCATION: DATA CENTER
ELEMENT: APPLICATIONS AND
APPLIANCES



OREGON'S NG9-1-1 RFI

FUNCTIONAL ELEMENTS - LVF

The **Location Validation Function** provides sufficient location-based information to a PSAP that allows a 9-1-1 call taker to dispatch emergency responders to a 9-1-1 call scene. The location information is provided by civic based addresses or latitude/longitude data.



LOCATION: DATA CENTER
ELEMENT: APPLICATIONS AND
APPLIANCES



OREGON'S NG9-1-1 RFI

FUNCTIONAL ELEMENTS - RULES BASED ROUTING

A **Rule Based Routing Proxy** benefits Next Generation 9-1-1 systems because of its ability to route calls based upon various parameters and enhances the ability to default route calls based upon payload.



LOCATION: DATA CENTER
ELEMENT: APPLICATIONS AND
APPLIANCES



OREGON'S NG9-1-1 RFI

REMAINING FUNCTIONAL ELEMENTS

- CUSTOMER PREMISES EQUIPMENT
 - HOSTED and STANDALONE
- PSAP DEMARCATION DEVICE
- THE ESInet



OREGON'S NG9-1-1 RFI PRICING

- PURELY VOLUNTARY
- MSRP BASED
- NO DISCOUNTS
- CREATE AND VALIDATE BUDGET



OREGON'S NG9-1-1 RFI

ROAD TO RFP

- LESSONS LEARNED
- COLLABORATIVE DESIGN
- VALUE BASED SCORING
- EVALUATION TEAM
- TIMELINE – KICKOFF 9/26/12 @ OEM, 10am-12pm



OREGON'S NG9-1-1 RFI

QUESTIONS?

