OREGON’S NEXT GENERATION
9-1-1-1 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

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>July 23, 2012</td>
<td>RFI Published</td>
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<td>August 24, 2012</td>
<td>Deadline Submission of Meeting Request</td>
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<td>September 5, 2012</td>
<td>Submission Deadline</td>
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<td>September 10-14, 2012</td>
<td>Week Held for Meetings</td>
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OREGON’S NG9-1-1 RFI CONTACTS

Administrative/General Questions;

Theresa Connell
911 Program Analyst
Technology & Response Services
Oregon Emergency Management
PO Box 14370
Salem, OR 97309
PH: 503-378-2911 Ext: 22230
Theresa.Connell@state.or.us

Technical Questions/Issues;

Tony Busam
RCC Consultants, Inc.
Public Safety Consultant
PH: 503-566-5902
tbusam@rcc.com
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
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
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.
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
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.
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
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.
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 9-1-1 RFI Information
OREGON’S NG9-1-1 RFI
REMAINING FUNCTIONAL ELEMENTS

- CUSTOMER PREMISES EQUIPMENT
  - HOSTED and STANDALONE
- PSAP DEMARCATION DEVICE
- THE ESI.net
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?