Emergency Management Technical Committee (EM-TC) Update

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Emergency Management Technical Committee

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Emergency Data Exchange Language (EDXL)

Internationally Available

Open and Non-Proprietary

Free Standards

EDXL Overview

- **EDXL Standards**
  - *EDXL-Common Alerting Protocol (CAP)*
  - *EDXL-Distribution Element (DE)*
  - *EDXL-Hospital Availability Exchange (HAVE)*
  - *EDXL-Resource Messaging (RM)*
- **EDXL Committee Specifications**
  - *EDXL-Situation Reporting (SitRep)*
  - *EDXL-Tracking of Emergency Patients (TEP)*
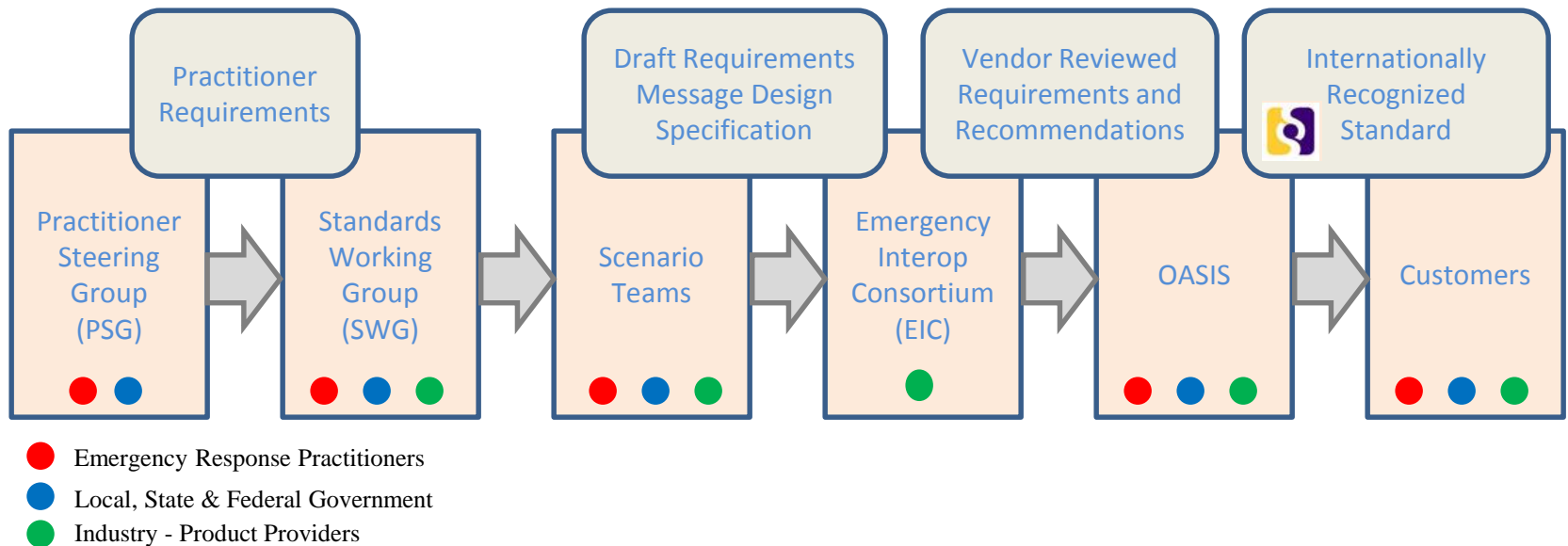- **EDXL Specifications Under Development**
  - *EDXL-Tracking of Emergency Clients (TEC)*
- **EDXL Reference Information Model (RIM)**
  - *EDXL-Supporting Elements*

EM-TC Background

- **Formed in 2003 with the first practitioner driven specification effort**

- **Emergency Data Exchange Language (EDXL) Process**

Process flow diagram:

| Practitioner Steering Group (PSG) | → | Standards Working Group (SWG) | → | Scenario Teams | → | Emergency Interop Consortium (EIC) | → | OASIS | → | Customers |

Flow labels:
- Practitioner Requirements (between PSG and SWG)
- Draft Requirements Message Design Specification (above Scenario Teams)
- Vendor Reviewed Requirements and Recommendations (above EIC/OASIS)
- Internationally Recognized Standard (above Customers)

Legend:
- 🔴 Emergency Response Practitioners
- 🔵 Local, State & Federal Government
- 🟢 Industry - Product Providers

EDXL - CAP
Common Alerting Protocol

🛐 **CAP**

- **Overview**:

  CAP is a message format for exchanging all types of alerts and warnings over many different networks. International adoption since 2004, ITU-T 1303

- **Features**:

  - *Extensible Markup Language (XML) with Digital Signature support*

  - *Transport and system independent*

  - *All-Hazards All-Media*

- **Versions:**

  - *v1.0 - 2004, v1.1- 2005, v1.2 – 2010 (v2.0 in progress)*

CAP Profiles

- **CAP 1.2 IPAWS Profile**
  - *Ensures that CAP data will be compatible with U.S. channels for alert distribution, including the Emergency Alert System (EAS).*

- **CAP Canadian Profile (CAP-CP)**
  - *Set of rules, and managed lists that are recommended in Canada.*

- **CAP Australia Profile (CAP-AU-STD)**
  - *Provides a formal national agreement on CAP, enabling Australian, State and Territory governments to improve exchange and interoperability of hazard alerting messages between systems.*

EDXL - DE
Distribution Element

- **Overview**:

  EDXL-DE facilitates the packaging of content and provides a standard set of elements in a header to describe that content in order to facilitate message delivery.

- **Features**:

  - *Ability to package both XML and binary data*
  - *Ability to use region-specific terminology*
  - *XML with Digital Signature and encryption support*
  - *Transport and system independent*

- **Versions:**

  - *v.1.0 - 2006 (v2.0 in progress)*

OASIS 🔗

EDXL - RM
Resource Messaging

- **Overview**:
  - *Organizes Emergency Logistics Information in a Standard XML Vocabulary*
  - *Another EDXL-DE Payload Message*
- **Features**:
  - *16 Predefined Response-Request-Report Resource Messages*
  - *User-defined Resource Messages Allowed Using Standard Terms and Datatypes*
- **Versions:**
  - *v1.0 - 2008*

EDXL - HAVE
Hospital Availability Exchange

- **Overview**:
  - *EDXL-HAVE allows the communication of the status of a hospital, its services, and its resources.*
  - *Includes bed capacity and availability, emergency department status, available services and the status of a hospital's facility and operations.*

- **Features**:
  - *Multiple use – EDXL-HAVE provides a flexible format which can be used during disasters, everyday emergencies, reporting etc.*
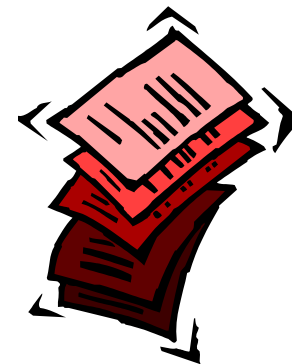
- **Versions:**
  - *v1.0 - 2008 (v2.0 in progress)*

EDXL - SitRep
Situation Reporting

- **Overview**:
  - *Supports reporting on incidents in consistent format*
  - *Exchange clear, well-defined information for accurate, well-informed decisions*

- **Features**:
  - *Choice of preconfigured reports including field observations for all situations*
  - *Incorporates standard Incident Command System (ICS) Forms*
  - *From brief observations of limited locations*
  - *To full scale planning for response to large scale disasters*

- **Versions**:
  - *v1.0 – 2016 Committee Specification*

EDXL - TEP
Tracking of Emergency Patients

- **Overview**:
  - *Supports exchange of emergency patient and tracking information during patient encounter from admission to release*

- **Features:**
  - *Patient tracking across the Emergency Medical Service (EMS) and emergency medical care continuum, as well as hospital evacuations and day-to-day patient transfers*
  - *Supports incident responders, emergency management, coordinating organizations, and care facilities in the chain of care and transport.*
  - *Special Committee Note to provide for the transformation of TEP data to/from HL7 Admission/Discharge/Transfer Messages TEP <->ADT.*

- **Versions**:
  - *v1.1 – 2016 Committee Specification*
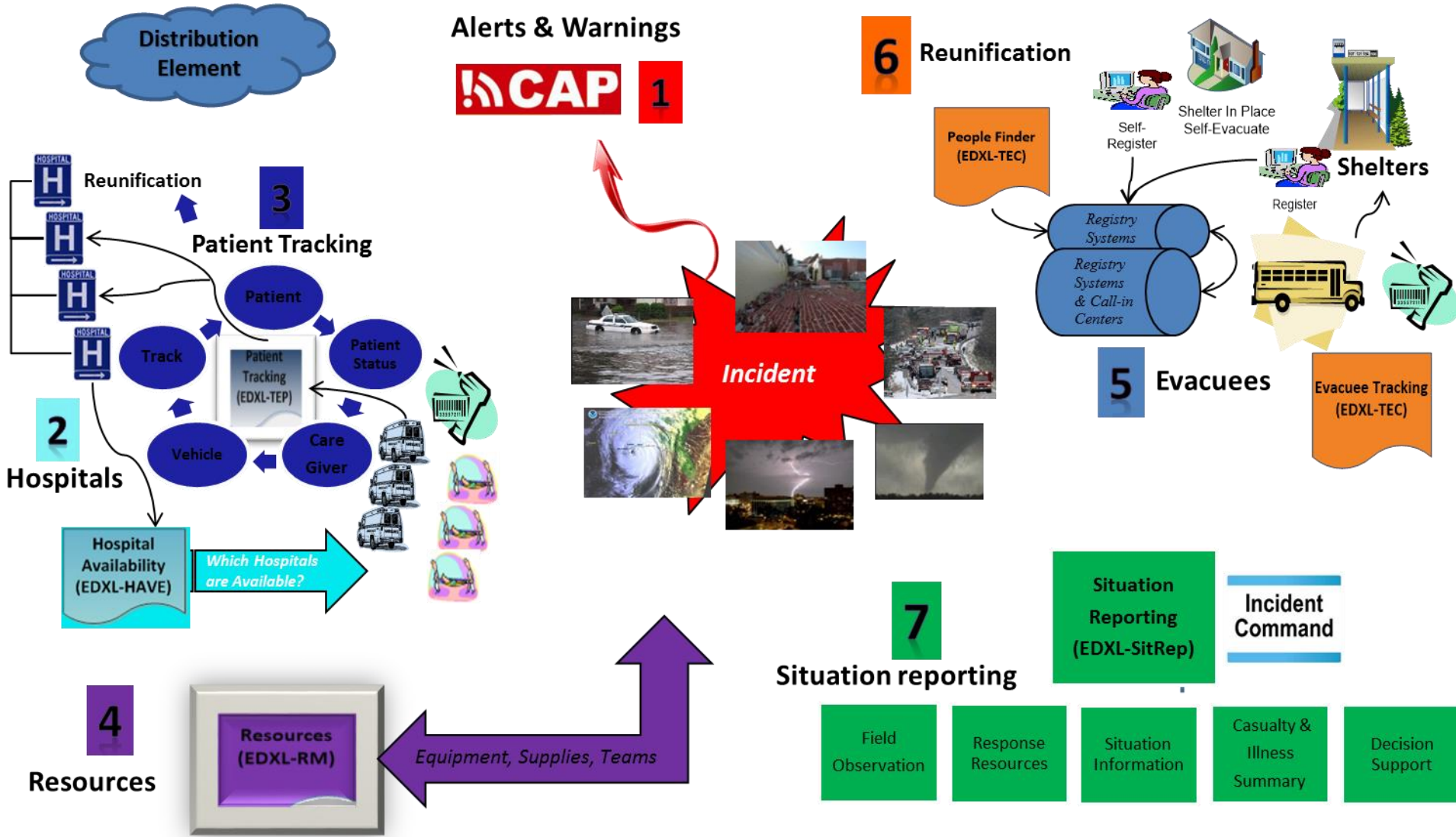
EDXL - RIM
Reference Information Model

- **Overview**:

  - *Provides a high-level, abstract, information model for the family of EDXL standards and Supporting Elements*

- **Features:**

  - *EDXL Common Types*

  - *EDXL CIQ (Contact Information)*

  - *EDXL GSF (Profile GML Simple Features)*

  - *Comprehensive UML Model of EDXL Suite of Standards*

Get Involved / Learn More

- *Ask software vendors about use of EDXL to encourage adoption*

- *Include references to the EDXL suite of standards when preparing Request for Proposal (RFP)*

- *Learn about the OASIS EDXL work and share this information with others*

- *Share information about EDXL work you are doing*

- *Participate in the Emergency and Emergency Adoption technical committees*

- *Contact OASIS with questions or ideas*

Questions?

Resources