

Organization for the Advancement of Structured  
Information Standards  
(OASIS)

Emergency Data Exchange  
Language  
Hospital Availability Exchange  
EDXL-HAVE

[www.oasis-open.org](http://www.oasis-open.org)

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# OASIS Process Overview

- ◆ OASIS is an international body
- ◆ Standards are free and open
- ◆ Emergency Management Technical Committee (EM-TC)
- ◆ Process
  - ◆ Committee Draft
  - ◆ Public Review Draft
  - ◆ Committee Specification
  - ◆ OASIS Standard

# Emergency Data Exchange Language (EDXL) Family of Standards

- ◆ Common Alerting Protocol (CAP) 1.1
- ◆ Distribution Element (DE) 1.0
- ◆ Hospital Availability Exchange (HAVE) Draft
- ◆ Resource Message (RM) Draft

# Emergency Data Exchange Language – Hospital Availability Exchange (HAVE)

- ◆ Overview: The intent of the HAVE is to enable the exchange of information related to medical and health organizations and their resources among other hospitals, state health departments and associations, emergency managers, and other responsible emergency agencies involved in response and preparedness. It is designed for everyday use, mass disasters, and preparedness scenarios.
- ◆ Progress:
  - ◆ Introduced to the EM-TC 1/25/06
  - ◆ Voted to accept 2/7/06
  - ◆ Voted Committee Draft 8/22/06
  - ◆ 60-day Public Comment Period concluded Jan 2007
    - ◆ 54 comments were received, some substantive
    - ◆ Second 60-day public comment period anticipated in October

# Emergency Data Exchange Language – Hospital Availability Exchange (HAVE) cont'd

## ◆ Need

- ◆ In a disaster or emergency situation, there is a clear need for hospitals to be able to communicate with each other, and with other members of the emergency response community. The ability to exchange data in regard to hospitals' bed availability, status, and capacity enables both, the hospitals and the other emergency agencies, to respond to emergencies or disaster situations with greater efficiency and speed.

## ◆ History

- ◆ The Virginia Hospital and Healthcare Association and COMCARE began to address this issue in 2004, seeking to aggregate in single, state-level web page hospital capacity and status information from the products of the two competing vendors selected by Virginia hospitals.

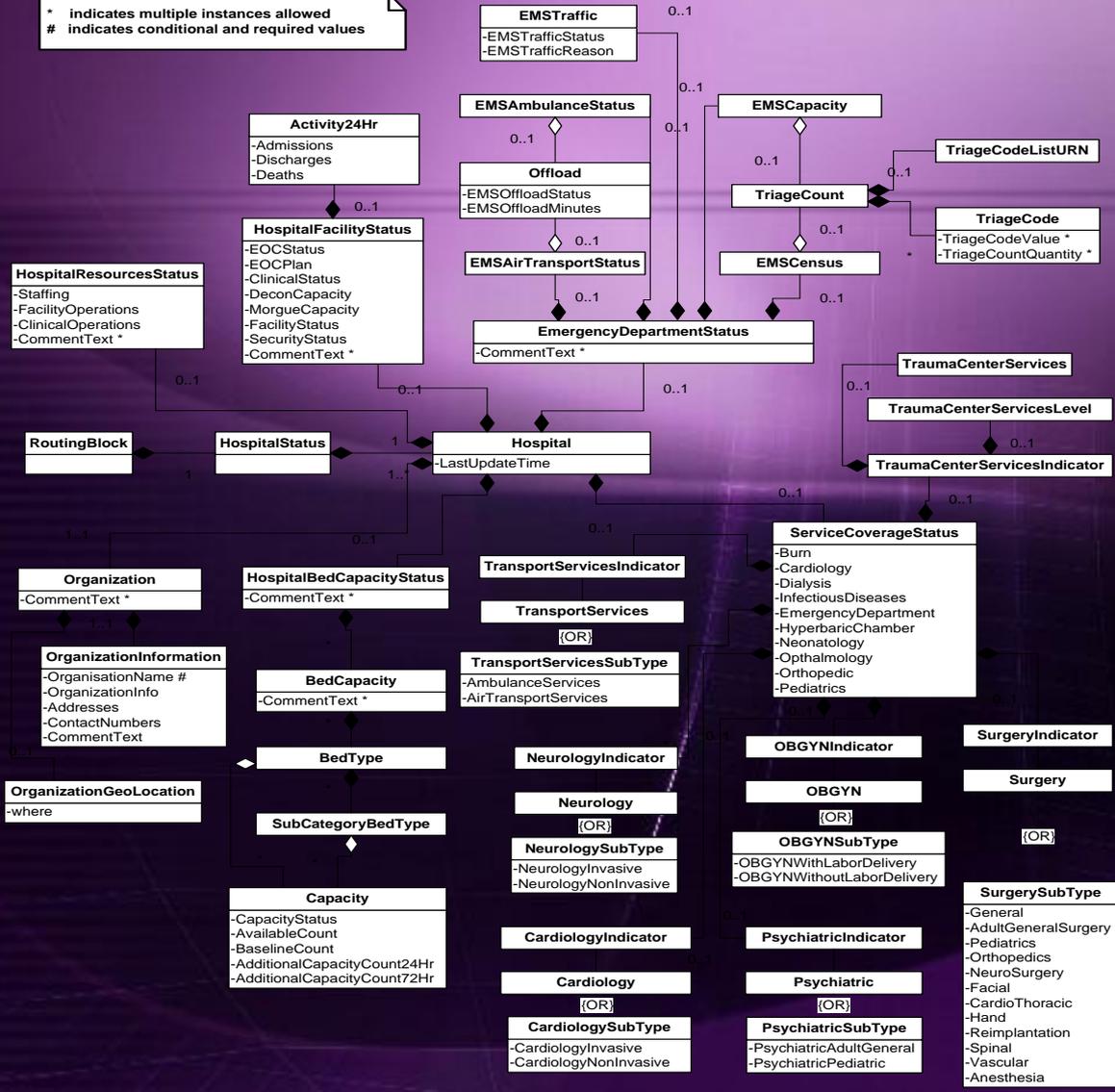
# Emergency Data Exchange Language – Hospital Availability Exchange (HAVE) cont'd

- ◆ Design Philosophy
  - ◆ Interoperability
  - ◆ Multi-use format
  - ◆ Flexibility
- ◆ Requirements for Design
  - ◆ Allow medical and healthcare organizations to communicate their status and availability information.
  - ◆ Be designed to allow its use by a wide variety of medical and healthcare organizations (including hospitals and nursing homes), along with other emergency response organizations (such as emergency management centers, public safety answering points, and dispatch centers).
  - ◆ Be able to be used as a payload or content element with the EDXL Distribution Element.
  - ◆ Allow the communication of status information of one or more organizations in a single exchange.
  - ◆ Allow the communication of the organization's status and availability information with regard to its facilities, operations, services, and resources.

# HAVE Document Object Model

(The EDXL-HAVE has no independent routing mechanism, so it requires a routing mechanism that is consistent with the EDXL-DE distribution types.)

\* indicates multiple instances allowed  
# indicates conditional and required values



# HAVE Elements

- ◆ **<HospitalStatus>** This is the overall top level container element for all the <Hospital> elements that may be present.
- ◆ **<Hospital>** This is the top level container element for each reporting organization. Each <Hospital> element has the following set of sub-elements.
- ◆ **<Organization>** The <Organization> element provides basic information about the name and location of the organization about which the status and availability is being reported.
- ◆ **<EmergencyDepartmentStatus>** The <EmergencyDepartmentStatus> element provides information on the ability of the emergency department of the organization to treat patients.
- ◆ **<HospitalBedCapacityStatus>** The <HospitalBedCapacityStatus> element provides information on the status and availability of the bed capacity of the organization. The bed capacity information for specific bed types can be reported.

# HAVE Elements cont'd

- ◆ **<ServiceCoverageStatus>** The <ServiceCoverageStatus> element provides information on the availability of specialty service coverage. This includes both the necessary staff and facilities. Some of the services capabilities are broken down into subtypes. This is to allow organizations to designate subtypes, if available. Others can report just the higher level specialties.
- ◆ **<HospitalFacilityStatus>** The <HospitalFacilityStatus> element provides information on the status of the facility. This includes information on the EOC and the capacity of the facility.
- ◆ **<HospitalResourcesStatus>** The <HospitalResourcesStatus> element provides information on the status of operations and resources of the organization.
- ◆ **<LastUpdateTime>** The <LastUpdateTime> element provides information on the time that the information was last updated.

# HAVE Status Summary

- ◆ Second 60-day public review anticipated to begin Oct 2007
- ◆ If no substantive comments are received, an OASIS ratification vote could occur in January 2008