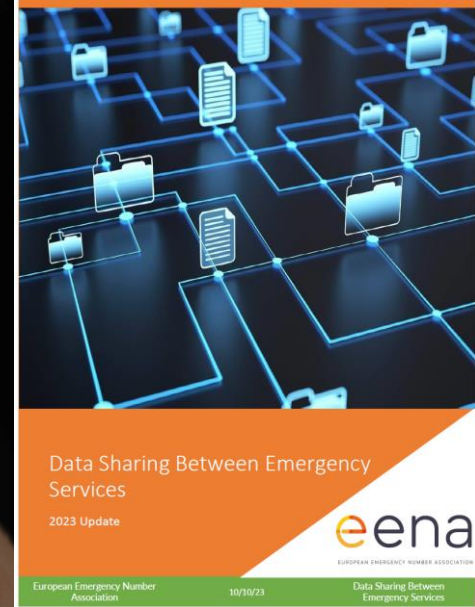




EENA

Data Exchange between PSAPs and EROs

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3. National, regional & international use cases + Q&A
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1. Intro

Why this doc updated?

- Lack of European standards
- Cross-border cooperation requirements
- Regional standardization efforts
- Contributions from the public and private sectors, and beyond

Executive summary

Introduction and justification

Overview of existing standardization

Use cases

Presented during EENA 2023 conference

Broadband communications requirements

Recommendations

Annexes

2. Standardization (1/3)

- NENA standards in North America ([FAQ](#)):
 - EIDO** - Emergency Incident Data Object, ANSI approved standard from Oct. 2021 ([NENA-STA-021.1a](#)), reviewed Apr. 2022
 - EIDO is a snapshot in time
 - Provides a standardized way to send incident data to Emergency Operations Centers, tow-truck operators, utilities and even news organizations
 - IDX** - Incident Data Exchange functional element that collects EIDOS, mentioned in NENA i3 specification.
 - Functional element aggregating EIDO information from multiple FEs within an agency and creating a composite EIDO representing entire incident state as known by the agency at the time.

"EIDOS are computer to computer notifications of incident state, as known by sender at time it was sent. They are standardized to allow Call to CAD, CAD to CAD, CAD-to-responder, PSAP to EOC, or any other systems from multiple vendors to interoperate where incident state is exchanged."

"The Inter-agency IDX obtains EIDOS from all the agencies involved in an incident and creates a composite view of the incident from the constituent EIDOS, so any authorized agency can then get a unified view of the incident."

2. Standardization (2/3)

- ISO and OASIS standards
 - **Emergency data exchange EDXL** framework with EDXL-CAP, EDXL-DE, EDXL-RM, EDXL-SitRep, EDXL-HAVE, EDXL-RIM, EDXL-TEP
 - Examples on how EDXL-DE is used in France and Spain presented later
 - CAP is used for Public Warning too!
 - **Shared situational awareness:** [ISO/TR 22351:2015](#) with structured message **Emergency Management Shared Information (EMSI)** that can be used complementary to other message protocols, i.e. CAP.
- National / Regional standards like CISU in France (based on EDXL framework), UCRI in Germany, ECAS in Ireland or MAIT in the UK.

2. Standardization (3/3)

- New standards?
 - Broadband communications perspective? I.e. About Mission Critical Video sharing.
 - GIS standards for Public Safety? Nothing specific as of now.
 - Ideally interoperability in Public Safety to be part of “[Interoperable Europe](#)” initiative of EC for reinforced public sector interoperability policy, containing the Interoperable Europe Act.

2. Standardization

Q&A

- Are you using any standards?
- Any new norms or standards coming?

3. Use cases (1/4)

- The Irish Emergency Call Answering Service (**ECAS**), as a national level 1 PSAP, has procedures in place to alert and share data with blue light organizations such as firefighters, police, or medical personnel.
- The data/interface is formatted and available as a proprietary XML schema from the ECAS's call handling platform and support for this schema has been implemented on the Emergency services systems.

3. Use cases (2/4)

- The **German UCRI** (Universal Control Room Interface) is an interface specification expected to be deployed across Germany, currently used in PSAPs in Berlin, Saarland and Saxony for data exchange with the emergency medical services

- The **French CISU** (*cadre d'interopérabilité des situations d'urgence*) protocol is a framework for interoperability in emergency situations based on **EDXL-DE** specification first used to exchange information from joint Paris metro area level 1 PSAP to Police, Firefighters and Medical Control Rooms.

3. Use cases (3/4)

- The **UK MAIT** (Multi Agency Incident Transfer) is an XML schema and open standard for secure electronic sharing of incidents between agencies based on a hub approach achieving secure inter-agency incident messaging in 16 seconds.
- Sponsors: BAPCO & Joint Emergency Services Group in Wales
- It's being used by cat. 1 (police services, ambulance trusts, fire & rescue services, coastguard and local authorities) and cat. 2 (i.e. the highway agency) EROs and voluntary groups to receive relevant information

- In several regions of **Spain** data exchange is based on the open **EDXL framework**:
 - Extremadura region shares incident data between regional 112 PSAP and National Police
 - In Madrid, regional 112 PSAP shares data with Emergency Medical Services
- Some cases also include cross-border cooperation:
 - Galicia region shares incident data between regional 112 PSAP and Portuguese neighbors

3. Use cases (4/4)

- The European Emergency Response Coordination Centre (**ERCC**) through EU Civil Protection Mechanism maintains direct link to civil protection and humanitarian aid authorities in EU Members enabling real-time exchange of information whenever resources from different countries are deployed to assist countries/regions in need.
- The ERCC acts as central 24/7 contact point when solidarity clause is invoked.

- **STRATEGY** H2020 project planned to develop a pan-European framework of pre-standardisation activities for systems, solutions, and procedures, addressing interoperability related crisis management.
- **BROADWAY** H2020 project included Mission Critical Video sharing, as tested in several scenarios across countries

3. Use cases

Q&A

- EU Civil Protection Mechanism and real-time exchange of information whenever resources from different countries are deployed to assist countries/regions in need...
- R&D projects dealing with pre-standardization and standardization processes...

4. Recommendations

- Standardization authorities shouldn't wait to be pushed by public and private orgs to start work to normalize data to be exchanged between Public Safety entities.
- Public safety entities should push for standardization on this field, and contribute actively to the standard definition
- Public authorities:
 - Work with neighboring regions/countries and standardization and regulation bodies nationally and internationally.
 - Be mindful of data privacy and consent requirements.
 - Share best practices!
- Vendors:
 - Build solutions that allow sharing info and avoid black boxes and make APIs adaptable to different requirements and standards.

4. Recommendations

Q&A

- On multi-agency collaboration...
- On cross-border collaboration...

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