

# EDEN CBRNE INNOVATION FAIR 2016



12 October 2016

End-user driven  
DEmo for cbrNe

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## EDEN Store

### A European Commission Seventh Framework Programme

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# EDEN Store goals



- Gathering Tools : making them accessible and available
- Bringing new functionalities and capabilities
- Improve the operational procedures

# EDEN Store Architecture

- Access to various Functionalities from the same EDEN Portal.

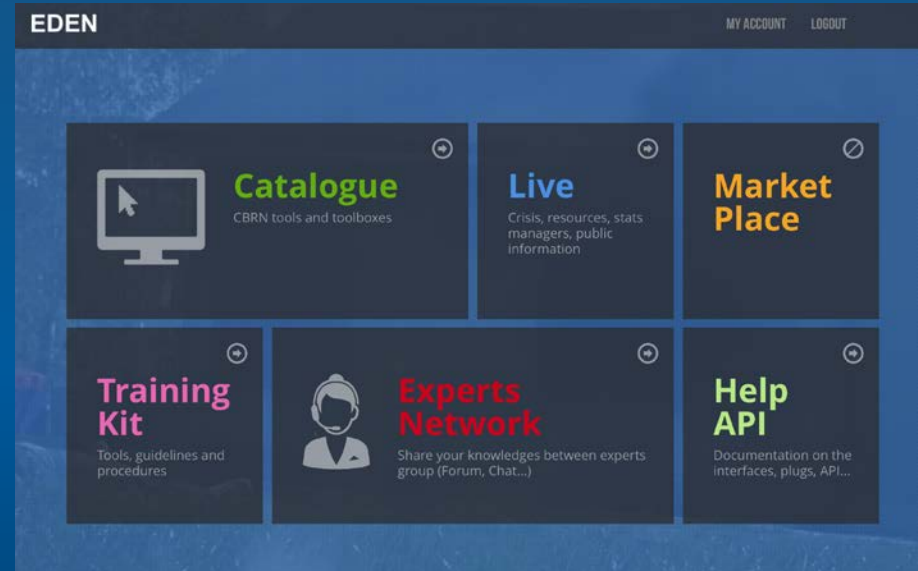


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# EDEN Store support of Crisis Cycle

- Reliability & Scalability
- Tools Catalogue and Market place and Tools Integration support (Help API) for **Planning**
- Training Kits for **Preparedness**
- Live sharing and tools data exchanges for **Response** (live or training)
- Expert Network for **Recovery** (best practices...)



## ***A Toolbox of Toolboxes:***

*i.e. the ability to integrate in a simple way already existing Tools and Toolboxes, to upgrade them, develop new tools and propose a comprehensive larger approach.*

## **Covering preparedness, crisis response & recovery phases**

## **Accessible by a “Store” (including in crisis)**

- With a choice of tools, toolboxes and “PLUGS” depending on the phase/parameters/languages/procedures in a static or a live mode
- Providing additional functions
  - User restricted forum and networks,
  - Scientific expertise and networks,
  - Market place

## **Continuously involving more stakeholders**

- Users: public organisations, first responders, large operators, media and population with their own tools
- Suppliers (industry, RTOs...) and SMEs

## Open Simple and Secure approach (tools and “plugs”)

- Consortium and suppliers’ tools designed to be connected or not
- Simple and more advanced plugs connecting heterogeneous tools

## Provides end users with available comparable solutions & expertise

- Selection by the Store of various tools (detectors, PPEs...) with different performances (costs, maturity, usability, national procedures, cultural...)
- To identify the best sets of tools for the situation (Toolboxes creation)

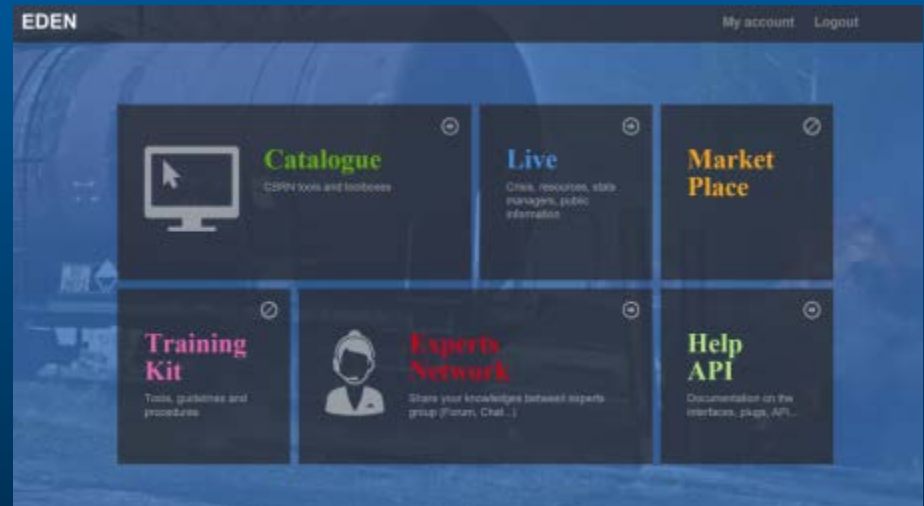
## From basic tools to systems, human expertise & knowledge

- equipment (communication, detection, decontamination...),
- situation awareness and C2...,
- procedures according to the country doctrine (CBRN triage...)

- Functions being implemented
  - EDEN Catalogue
  - EDEN Live
  - Experts Network
  - Market Place
  - Training Kit
- Tool Status
  - >250 Tools are now on Store
- Accessible via
  - Explorer
  - Google
  - Safari
  - Smartphone, tablet, computer



<https://eden.astrium-eu-projects.eu/>



# EDEN STORE – HOW TO REGISTER AND LOG IN



eden.astrum-eu-projects.eu

EDEN HOME CATALOGUE TOOLKIT HELP LIVE MY ACCOUNT LOGOUT

## CREATE AN ACCOUNT

WHEN YOU CREATE AN ACCOUNT, A NOTIFICATION WILL BE SENT TO THE VALIDATION BOARD IN CHARGE OF THE ACCOUNTS VERIFICATIONS AND YOU WILL RECEIVE AN EMAIL TO INFORM YOU WHEN YOUR ACCOUNT HAS BEEN REVIEWED.

Username

Password Re-type password

Firstname Lastname

Email Phone  
john.doe@example.eu

Organization Category  
[Create an organization](#)

Activity

CANCEL SAVE

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 313077.

# EDEN

Username  
frederic

Password  
.....

Login

Create an account

[Password recovery](#)

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# THE EDEN STORE - CATALOGUE



- **PURPOSE**
  - Provides end users with available comparable solutions & expertise
  - Selection via the Store of various tools with different performances
  - To identify the best sets of tools for the situation
  
- **SEARCH BY**
  - Domain
  - Provider
  - Tool Name
  - Keywords

EDEN HOME CATALOGUE SOP TOOLKIT HELP BOARD MY ACCOUNT LOGOUT

## CATALOG

I want **Categories** in **CBRNE domain** by **Provider**.

**2** SEARCH

Reset Search

**3** SEARCH WITH MORE CRITERIAS

Tool name **1** SEARCH

1 2 3 4 5 6 7 8 9 10 11 >

208 result(s)

**CONFCOM - COMMUNICATION SOLUTION**  
AIRBUS DEFENCE & SPACE  
Updated on 5 août 2016

Communication is the most important asset to have on a CBRN operation. First responders on the field in the TPE have to communicate to the HQ backwards and vice versa. To communicate, we need one mobile network coverage and mobile phones. Astrium proposes to deploy one of its products: a secured "communication bubble". Such a network is deployed easily.

Chemical Biological Radiological Nuclear

7 10 1  
TRL IRL Comments

**3D CITY**  
ASTRI POLSKA SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA  
Updated on 13 février 2015

The "3D City" solution allows for enhanced visualization of urban areas, team building, industrial infrastructure and interior of buildings in real time. That service solution is available through a web browser, it provides access to the 3D model of the city, containing details of buildings, urban / industrial infrastructure and green areas. The 3D model can be enriched attribute.

Chemical Biological Radiological Nuclear Explosive

9 10  
TRL IRL

## CBRN TOOLS AND TOOLBOXES

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# CATALOGUE - ADD NEW TOOL AND TOOL PAGE

EDEN HOME CATALOGUE TOOLKIT HELP LIVE MY ACCOUNT LOGIN

## CREATE A NEW TOOL

Name: \_\_\_\_\_

Short description: \_\_\_\_\_

Full description: \_\_\_\_\_

**CBRNE domains**

- Chemical
- Biological
- Radiological
- Nuclear
- Explosive
- Unknown

**TRL**

- TRL1 - Basic principles observed and reported
- TRL2 - Technology concept and/or application formulated
- TRL3 - Analytical and experimental critical function and/or characteristic proof of concept
- TRL4 - Component and/or breadboard validation in laboratory environment
- TRL5 - Component and/or breadboard validation in relevant environment
- TRL6 - System/subsystem model or prototype demonstration in a relevant environment
- TRL7 - System prototype demonstration in a real environment
- TRL8 - Actual system completed and qualified through test and demonstration
- TRL9 - Actual system proven through successful mission operations

EDEN HOME CATALOGUE TOOLKIT HELP LIVE MY ACCOUNT LOGIN

**GENERAL** COMPLEMENTARY ILLUSTRATIONS ATTACHMENTS INTERFACE REVIEWS ETHICAL QUESTIONS

Fast understanding for quick decision making, this is what Haya provides.  
 With Haya you can draw up training and live scenarios, conduct after action debriefs, and share them easily.  
 Drop icons on precise satellite maps, draw evacuation plans through fine 3D data terrain model, get live crisis feeds from social networks, collect data from a large scale of compatible sensors.

Haya can be deployed on standalone Windows or MacOS platforms. Upcoming versions will bring the capability to use mobile platforms as iOS, Android and Windows phones.

**END USERS TARGETED**

Category	Sector	References	Comments
Police officer	Public Private		
Fire & rescue	Public Private		
Medical	Public Private		
Military	Public Private		
Trainer	Public Private		
Incident commander	Public Private		
Inter-service liaison	Public Private		
CBRNE	Public Private		
Fire	Public Private		
Police	Public Private		
Medical expert	Public Private		
Military expert	Public Private		
Forensic	Public Private		

**OPERATING ENVIRONMENT**

Parameter	Type	Value	Unit
Location of incident	Input		GPS coordinates (WGS 84)
Date of incident	Input		Date-time ISO 8601
Temperature	Input		Celsius Degrees
Wind speed	Input		Meters per second

**SECURITY CYCLE**

- Recovery
- Response
- Preparedness
- Prevention
- Threat assessment

**INFORMATIONS**

Update at: 01/03/2015  
 TRL: 7  
 IRL: 8

**CONTACTS**

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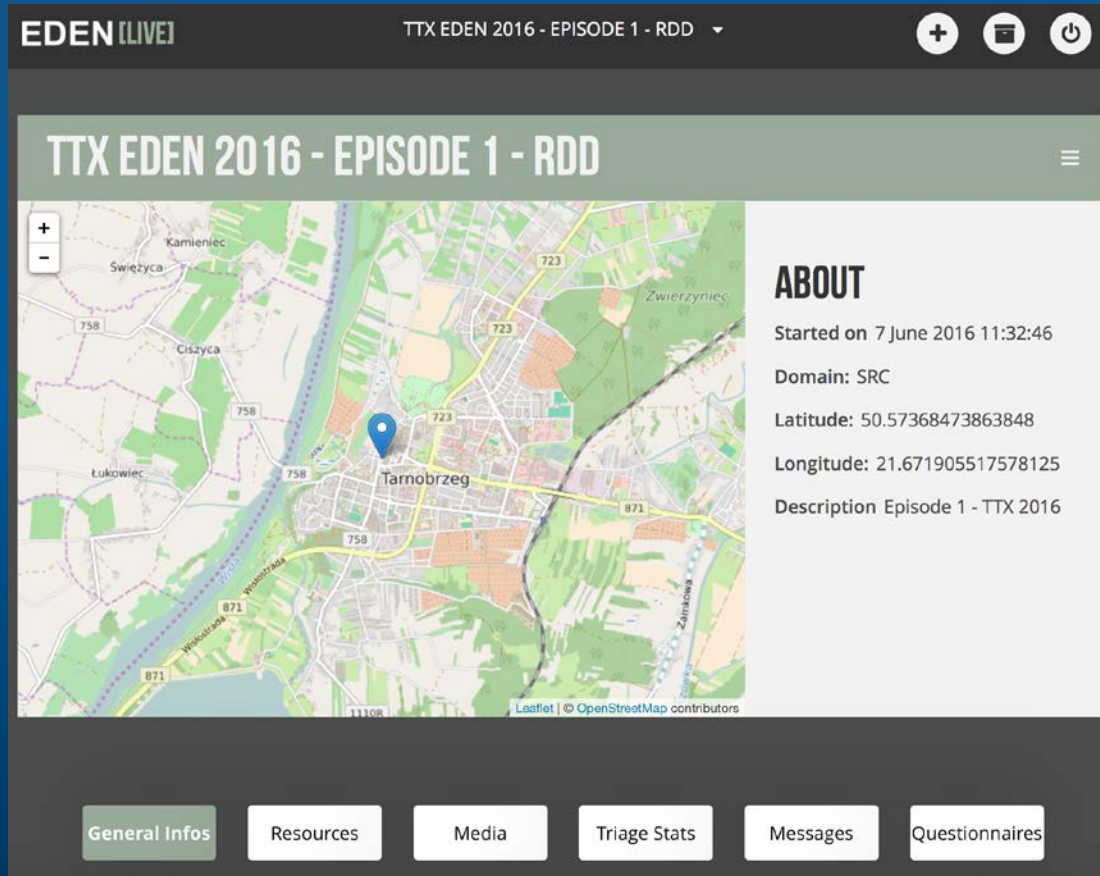
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**TABS**

View all messages picture communication  
 command control situation overview  
 Help page

- **PURPOSE** – To provide end users with ability to simulate, provide training and real time crisis management information



The screenshot displays the EDEN LIVE interface for 'TTX EDEN 2016 - EPISODE 1 - RDD'. The interface includes a map of Tarnobrzeg, Poland, with a blue location pin. To the right of the map is an 'ABOUT' section with the following details:

- Started on** 7 June 2016 11:32:46
- Domain:** SRC
- Latitude:** 50.57368473863848
- Longitude:** 21.671905517578125
- Description** Episode 1 - TTX 2016

At the bottom of the interface, there are six navigation buttons: General Infos, Resources, Media, Triage Stats, Messages, and Questionnaires.

## REAL TIME AND SIMULATED CRISIS INFORMATION

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# EDEN LIVE



- Resources
  - Resources available
- Media
  - Media recordings during crisis
- Messages
  - Messages communicated during crisis
- Triage Statistics

EDEN (LIVE) TTX EDEN 2016 - EPISODE 1 - RDD

TTX EDEN 2016

TECNOALIMEN... 62

Deployed Available

65 RESOURCES

Available

KBB31 9 0.0, 0.0

KBB12 9 0.0, 0.0

KBB21 9 0.0, 0.0

Resources dedicated to crisis: TTX EDEN 2016 - Episode 2 - NPP

NB-057 9 0.0, 0.0

KBB19 9 0.0, 0.0

Erraplus06 9 0.0, 0.0

General Infos Resources Media Triage Stats Messages Questionnaires

EDEN (LIVE) CRISIS TEST FOR WARSAW/DUNKELSTEIN 18/04/16

NUHIA AGE TYPE GENDER

9 Triaged People

Number of people by severity degree

14 Deceased

11 Immediate

12 Delayed

Unknown: 6

Field Assessment: 0

Decontamination: 0

Evacuation: 0

Advanced Medical Post: 0

Hospital: 0

Decontaminated People

General Infos Resources Media Triage Stats Messages Questionnaires

EDEN (LIVE) CRISIS TEST FOR WARSAW/DUNKELSTEIN 18/04/16

MESSAGES

bolig to sig bol aðstaf e. orlu dögur vögu laud laud sig dögur sig vögu orlu dögur sig vögu orlu dögur sig vögu

Admin@Defence (AIRBUS DEFENCE & SPACE)

test 11:34:01 am 22 Jun 2016

test

test

Haya.Airbus (AIRBUS DEFENCE & SPACE)

Leakage 9:57:36 pm 29 Jun 2016

Unknown material

Message title

Message content

Send

General Infos Resources Media Triage Stats Messages Questionnaires

EDEN (LIVE) TTX EDEN 2016 - EPISODE 1 - RDD

MEDIA

TTX EDEN 2016

BAE SYSTEMS

ENEA

AIRBUS DEFENCE & SPACE

AOKIN

Sent from the beginning. All type

12:49:16 pm 8 Jun 2016

12:34:52 pm 8 Jun 2016

12:31:20 pm 8 Jun 2016

12:29:55 pm

12:22:19 pm

12:22:18 pm

General Infos Resources Media Triage Stats Messages Questionnaires

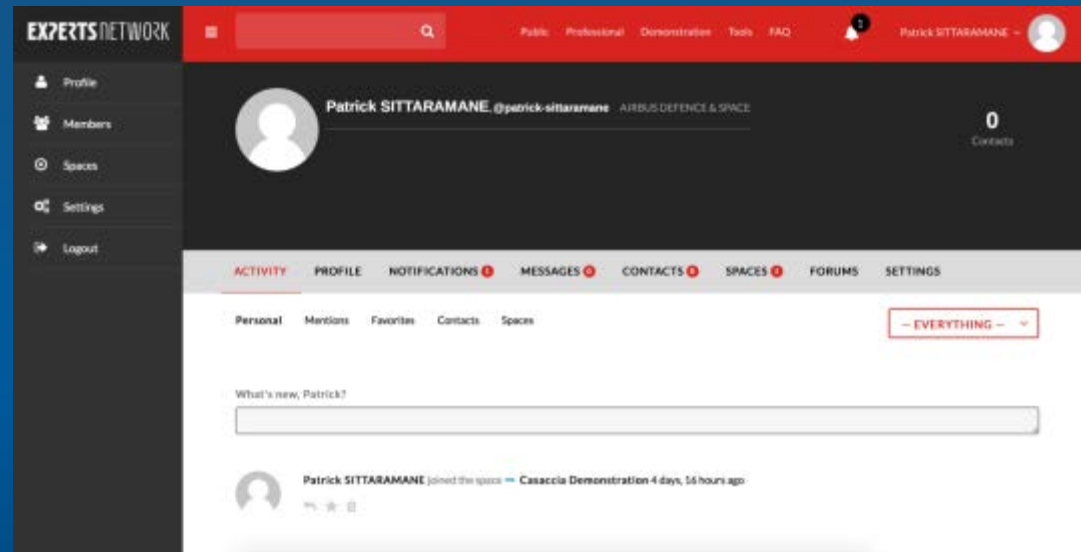
ALL INFORMATION IS LOGGED IN THE STORE

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# EXPERTS NETWORK



- Experts space to share their knowledge and discuss (“chat”)
- Divided in 4 mains topics :
  - **Public topic** : information related to EDEN project
  - **Professional topic** : discussion focus on EU job background
  - **Demonstration topic** : feedback on the current or ended demonstration
  - **F.A.Q** : Experts Network usual questions and answers.

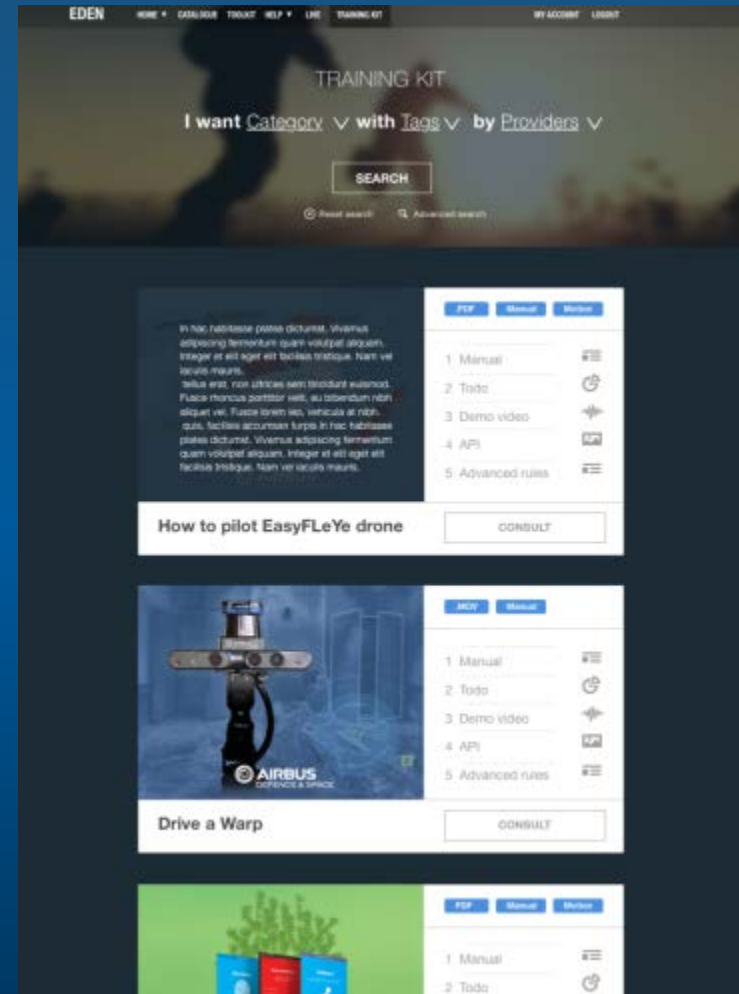


## SHARE YOUR KNOWLEDGE

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- Tools guidelines and procedures
- Tools are highlighted with
  - Manual
  - Guidelines
  - Demonstration videos
  - Rules
  - ...



## TOOLS GUIDELINES AND PROCEDURES

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- OBJECTIVE
  - Set of webservices for tool integration and EDEN Live.
  - Express tools in terms of their operations, data inputs and outputs. and underlying types.
- BENEFITS
  - Develop links by providing all the building blocks, which are then put together by the tools providers.
  - Develop potential plugs between tools providers.

AUTHENTICATION : HOW TO AUTHENTICATE YOURSELF WITH ALL WEB SERVICES OF THE API. <a href="#">Show/Hide</a>   <a href="#">List Operations</a>   <a href="#">Expand Operations</a>	
<a href="#">GET</a> /TOKEN	Login to get an access token to use other web services or refresh an existing access token.
CRISES : INTERACT WITH A CRISIS, CREATE ONE OR JOIN ONE. <a href="#">Show/Hide</a>   <a href="#">List Operations</a>   <a href="#">Expand Operations</a>	
<a href="#">GET</a> /CRISES	List all currently active crises managed by the EDEN portal.
<a href="#">POST</a> /CRISES	Create a new crisis.
<a href="#">PUT</a> /CRISES/{CRISISID}	Updates some data about the crisis specified as parameter.
<a href="#">GET</a> /CRISES/{CRISISID}/CIRCLE	List all accounts associated with the specified crisis.
<a href="#">POST</a> /CRISES/{CRISISID}/CIRCLE	Join the circle of the specified crisis.
TOOLS : LIST THE TOOLS REGISTERED IN THE EDEN PORTAL. <a href="#">Show/Hide</a>   <a href="#">List Operations</a>   <a href="#">Expand Operations</a>	
<a href="#">GET</a> /ORGANIZATION/TOOLS	List all the organization's tools of the account used.
<a href="#">GET</a> /TOOLS	Get all the tools of the EDEN portal.
ORGANIZATIONS : ALL THE ORGANIZATIONS REGISTERED INSIDE THE EDEN PORTAL. <a href="#">Show/Hide</a>   <a href="#">List Operations</a>   <a href="#">Expand Operations</a>	
<a href="#">GET</a> /ORGANIZATIONS	Get all the organizations of the EDEN portal.
MESSAGE TYPES : GET ALL THE TYPES OF MESSAGE AVAILABLE TO USE WHEN SENDING A DATA. <a href="#">Show/Hide</a>   <a href="#">List Operations</a>   <a href="#">Expand Operations</a>	
<a href="#">GET</a> /MESSAGETYPES	Get all the types of message available to qualify the priority of the data to send.
LOCATIONS : CREATE, MODIFY AND LIST THE LOCATIONS. LIST THE BASE REFERENTIALS FOR THE LOCATIONS. <a href="#">Show/Hide</a>   <a href="#">List Operations</a>   <a href="#">Expand Operations</a>	
<a href="#">POST</a> /LOCATIONS	Create a new location.
<a href="#">GET</a> /LOCATIONREFERENTIALS	Retrieves the constant referentials that can be used to give a base referential to the locations created.
LOCATIONS NORIA : CREATE, MODIFY AND LIST THE LOCATIONS. <a href="#">Show/Hide</a>   <a href="#">List Operations</a>   <a href="#">Expand Operations</a>	
<a href="#">PUT</a> /LOCATIONS/{LOCATIONID}	Updates the data of the location whose identifier is specified in the path.
<a href="#">GET</a> /CASUALTIES/{CASUALTYID}/LOCATIONS	Retrieves location related to the specified casualty.
<a href="#">POST</a> /CASUALTIES/{CASUALTYID}/LOCATIONS	Sends a location related to the specified casualty.
<a href="#">GET</a> /FIELDASSESSMENTS/{FIELDASSESSMENTID}/LOCATIONS	Retrieves location related to the specified field assessment.
<a href="#">POST</a> /FIELDASSESSMENTS/{FIELDASSESSMENTID}/LOCATIONS	Sends a location related to the specified field assessment.

## DOCUMENTATION ON INTERFACES AND PLUGS

# EDEN API – Synergies between Tools

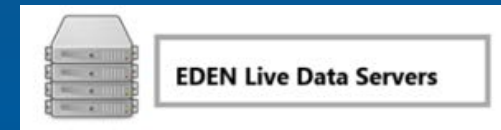


## One Time Message

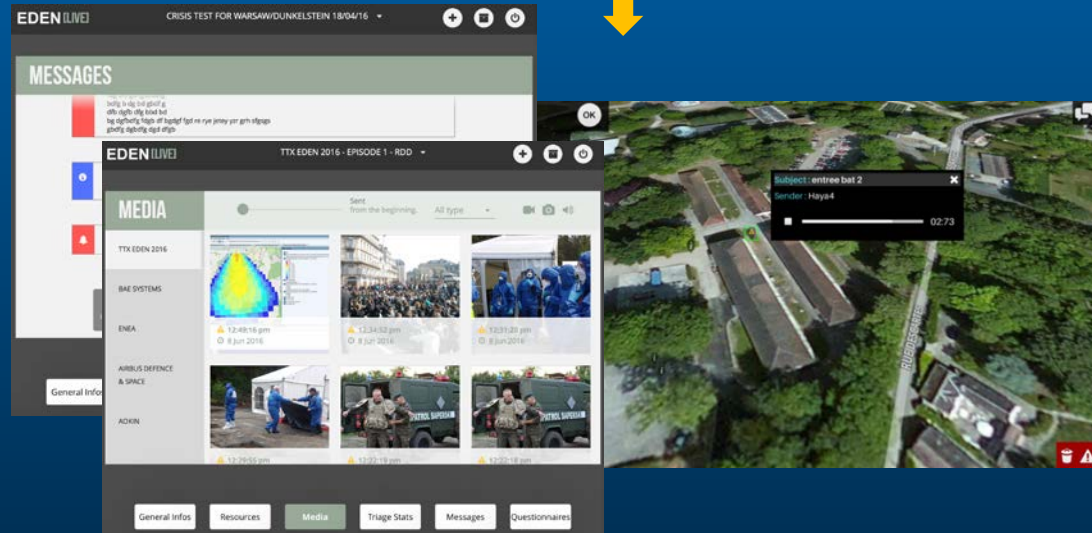
Text, audio, picture, measure and chat conversation



## EDEN live Data Server



## EDEN Live / Haya



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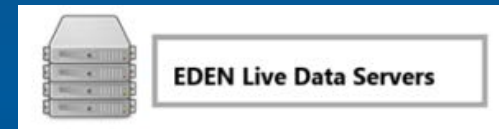
# EDEN API – Synergies between Tools



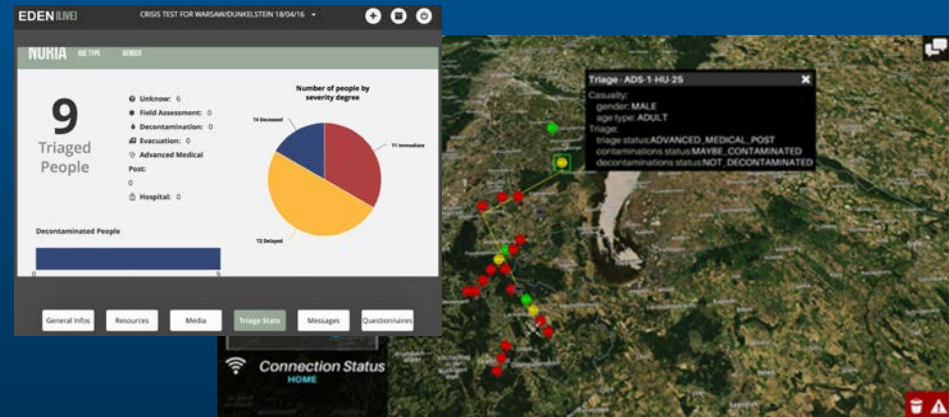
## NORIA



## EDEN Live Data Server



## Haya / EDEN Live



# EDEN TOT AND STORE – SUMMARY OF BENEFITS



- **EDEN Catalogue**
  - Allows the user to **make a selection** by the Store of various tools (detectors, PPEs...) with different performances (costs, maturity, usability, national procedures, cultural...)
  - To identify **the best sets** of tools for the situation (Toolboxes creation)
- **EDEN Live**
  - Provides simulation, training and real time and crisis information of all the resources connected to EDEN live
  - Logged information can be used to improve crisis response
- **END User / Experts Network**
  - Provides a secure forum to allow practitioners to share information and expertise
- **EDEN Training Kit**
  - Provides a central repository to share training kits/modules and operating procedures
- **EDEN API**
  - Information on the plugs and interfaces to allow new and legacy tools to connect to each other and via EDEN live

# CONTACTS AND EDEN CONSORTIUM



- EDEN website : <http://www.eden-fp7-security.eu/>
- Coordinator contact point & links with other projects: Clive Goodchild  
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End User Driven Demonstrator for CBRNe (313077)

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