THE OBJECTIVES

To develop a pan-European Test-bed for Crisis Management capability development

To develop a comprehensive Portfolio of Crisis Management Solutions

To facilitate a shared understanding in Crisis Management across Europe
TRIAL RATIONALE

• South Region CP HQ officer, (Nov. 2014): “I want an Operational Data Lift”

• DRIVER, D41.22: SOTA response systems (Feb. 2015, Jan 2016)
  Understanding the relief effort as a whole
  Inter-agency information sharing

• Mandate M/487 – (July 2013) “… improve the management of vertical bottom-up information flow for situation assessment”
RESEARCH QUESTIONS

• RQ1: Do COP solutions enable better, faster sharing of information with less effort?

• RQ2: Can a simulator bring effective support to this kind of trial?
SCENARIO: A COMPLEX EVENT
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SCENARIO

- *Forest fire with cascading effects* on a *main road* creating a *chemical threat* on the nearby town across the *border*
- 45 minutes of simulated time => 3 to 4 hours of operational time
PRINCIPLE OF TRIAL

• Compare Legacy system with COP Solution

• Run three times the same scenario:
  • Run1 with Legacy system
  • Run2 & Run3 with COP Solutions
COP SOLUTIONS

Information exchange (EMSI, CAP, EDXL-DE)

Situation map

Web access

Logbook
EXPERIMENT SET-UP

LEGACY (Run1)

COP Solutions (Run 2 & 3)

ERCC
National HQ
Regional HQ
Local HQ
Field CP
Asphodèle
LUPP
Valabre XVR-Simulator

COP Solution
Crisis Wall
CAP
Large Event (2)
Life-X COP (3)
EMSII

ERCC
National HQ
Regional HQ
Local HQ
Field CP
Asphodèle
LUPP
Valabre XVR-Simulator
PARTICIPANTS
COMMAND POSTS & STAFFING

Zone Headquarter
EMIZ, Valabre, Gendarmerie

National Headquarter
SDIS 83, Paris firebrigade

Field Command Post
Marseille Firefighters

Local Headquarter
SDIS 13

Swedish Headquarter
MSB
PARTICIPANTS
SIMULATION SUPPORT TO THE TRIAL

- XVR simulator
- Map: Valabre Island
- CESIR Rooms
PARTICIPANTS
EVALUATORS & DRIVER PARTNERS

**External Evaluators:**
- Norfolk Fire Rescue Service (UK), (Incident commander, teacher of incident command)
- Institut der Feuerwehr (D) (Incident commander, teacher of incident command)
- CESS Company (Ecossian Project), security expert

**Driver partners:**
- Evaluators: JRC, FhG IAO, MSB
- Tool providers & organisers: Thales, Frequentis, JRC, Valabre, Safe cluster (13 persons)
MEASUREMENTS (1/3)

DISSEMINATION INFORMATION

- **Dissemination of key information (Log analysis)**
  - 2 threads of information
    - Chemical leak
    - Warning to Sweden
- **Usability of tools**
- **Questionnaire (Players, Evaluators)**
- **Open feedback sessions**

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<thead>
<tr>
<th>Nr</th>
<th>Thread key points</th>
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<tbody>
<tr>
<td>1</td>
<td>Chemical risk known</td>
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<tr>
<td>2</td>
<td>Plume Requested</td>
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<tr>
<td>3</td>
<td>Plume Uploaded</td>
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<td>4</td>
<td>Leak alarm creation</td>
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<tr>
<td>5</td>
<td>Plume consulted by EMIZ</td>
</tr>
<tr>
<td>6</td>
<td>Leak alarm transmitted to Sweden</td>
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<tr>
<td>7</td>
<td>Message to European authorities</td>
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MEASUREMENTS

DISSEMINATION TIME OF KEY INFORMATION

- Not faster
- Easier: « less explanation required »
- Shared information is richer due to higher interoperability level
MEASUREMENTS RQ2

**Interest of Simulator is validated**

Q11 - Do you think that the simulator plays an interesting role in the experimentation?

Q10 - Do you think that the set-up of this experimentation is well adapted to the objective?

Incident commanders
Evaluators & players
MEASUREMENTS RQ1

USABILITY

- 1 hour training on tools
- Easy appropriation
- Good usability evaluation
- No significant difference between the two COP tools
MAIN RESULTS (1/2)

Operational benefits:
- Information is **NOT** disseminated **FASTER** (at least we could not observe it)
- Exchange of information is perceived as **EASIER** (less explanations required)
  - Can explained by richer information (use standards & ability to exchange)

Usability:
- COP tools are useful only if the right information is shared (necessary to other bodies)
- COP tools are easy to use: no significant difference between them
- Aggregation is required for higher levels of command
- Language barrier is there
  - Language of logbook
  - Symbology (need for a standard)
MAIN RESULTS (2/2)

Benefit of Valabre simulator (CESIR):
- Praise by players (feeling of reality)
- Ability to compare
- => New opportunity (testing of new procedures, solutions)

Others
- Increase of interoperability (LUPP and ASPHODELE)
- A step towards a computerized chain of command
- Ideas for future trials: more complex scenario, more Bodies involved (e.g: health)
CONCLUSION

« The comparison with SYNERGI was really interesting. It enabled users to see the difference and industrials to know the legacy » (Marseille Firebrigade officer)

« The set up experiment was excellent » (Norfolk fire and rescue service)

« I would be delighted to follow the next steps. » (officer Institut der Feuerwehr NRW)

« I learned a lot from the FP7 security project (ECOSSIAN EU project) » (Norfolk fire and rescue service)

Q16 - Would you be interested in being involved in these future experimentations?
CONCLUSION

- LEARNING BY DOING TOGETHER: Context based, no abstract truth
- STANDARDS are beneficial to heterogeneous coalitions
- A Common Operational Picture requires INFORMATION MANAGEMENT
- Main benefit is: EASIER, RICHER INFORMATION

- NEXT STEP: Trial 2, Valabre, Octobre 2018
THANK YOU.
ANY QUESTION?
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