

REACT project, the trials in Venezia and a solution to multilingual calls

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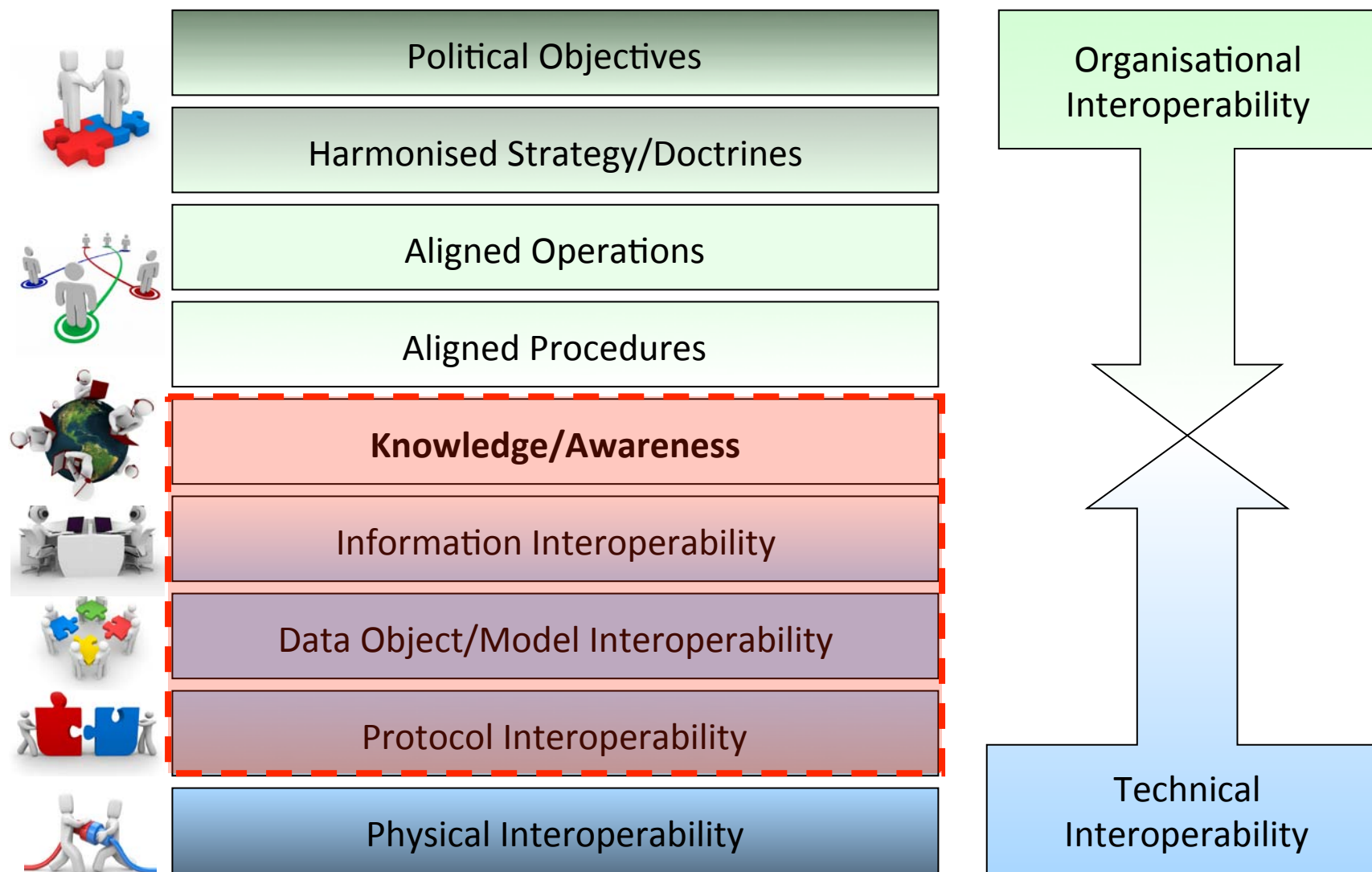
The REACT project

- Funded by the EC under FP6
- 2.5 years, 10 partners
- Trials in Italy, Germany, UK
- Scope: improving emergency management through data sharing by defining open data



Protocols and a distributed architecture
scalable from local level up to European level

REACT and the interoperability layers





The challenge of integrated emergency management

- In spite of the efforts made in integrating emergency management, each and every involved Organisation makes use of its own Command and Control System, well adapted to their needs and procedures.



The challenge of integrated emergency management

- Unfortunately, such systems are NOT able to share data, or, in other words, are not interoperable
- As a consequence of this, operators are used to communicate in voice (typically by phone) even when sitting few meters away from each other



CNVVF and REACT

- In 2006, the National Corps of Firemen started to work on the REACT project. Given the well established cooperation with 118 Health Services and other local Emergency Organisation, the Provincial Command of Venice was identified as their representative and responsible for the field trials.
- SUEM (Health Emergency Services) enters the trials as peer organisation for data sharing



Factual involvement in the trials

- In the project trials, the Provincial commands of Treviso (for across-boundaries interventions), Aosta (showing the bilingual management of emergency calls in French language) and Bolzano (showing the bilingual management of emergency calls in German language)



REACT: the trials

- In January-February 2009, the trial phase of REACT was executed, with the active participation of all the involved Emergency Services
- The implemented system showed well all the advantages of quick and efficient data sharing between Organisations. The main positive outcomes were the reduction of management time, the increased availability of information and precision in locating the event



REACT: challenges left open

Aiming at an actual adoption of the REACT concept in real operations, the main organisational challenges for Emergency Services are:

- To get authorisation by all decision makers of the organisations willing to share data; such authorisation should take the form of an agreement defining operational procedures, IT security and compliancy levels with in-force regulations and laws
- The integration of interoperability functionalities with existing legacy systems operating in command and control rooms
- La definition of agreed operational procedures for sharing data and information on events

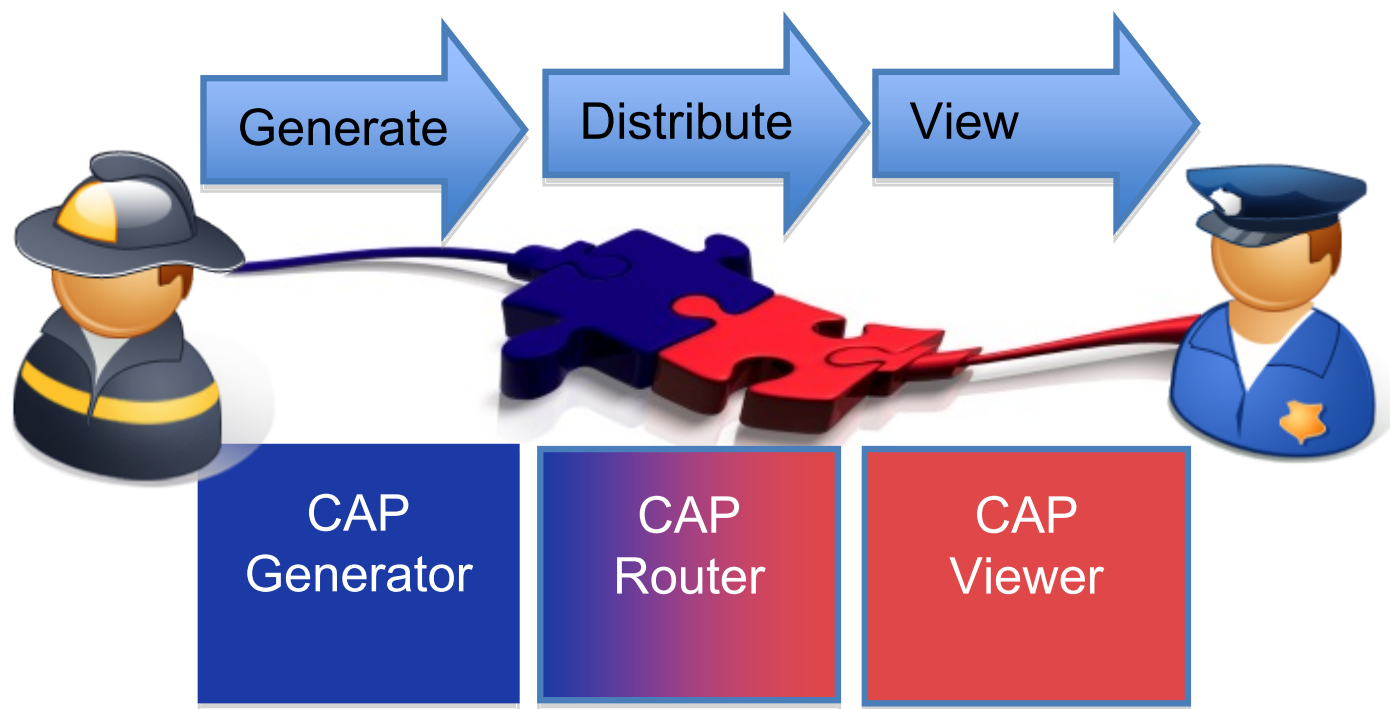


A wish for a future roll-out...

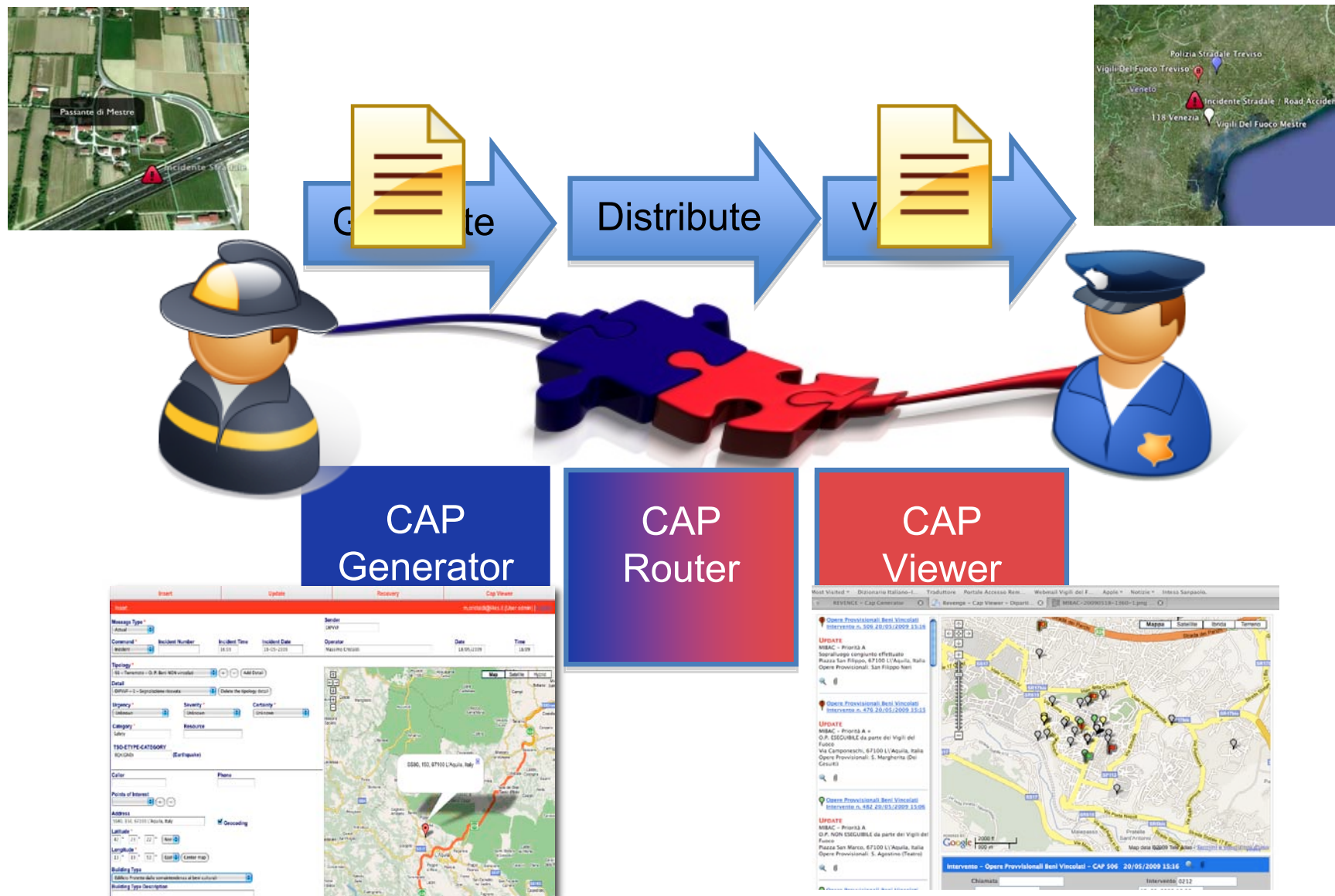
May VENEZIA, with its multi-facet and unique environment, become a first tangible example of a new way of guaranteeing citizens' safety thanks to the recent applications for interoperability.

And may such shared view of different Emergency services be a driver for larger implementation at national scale.

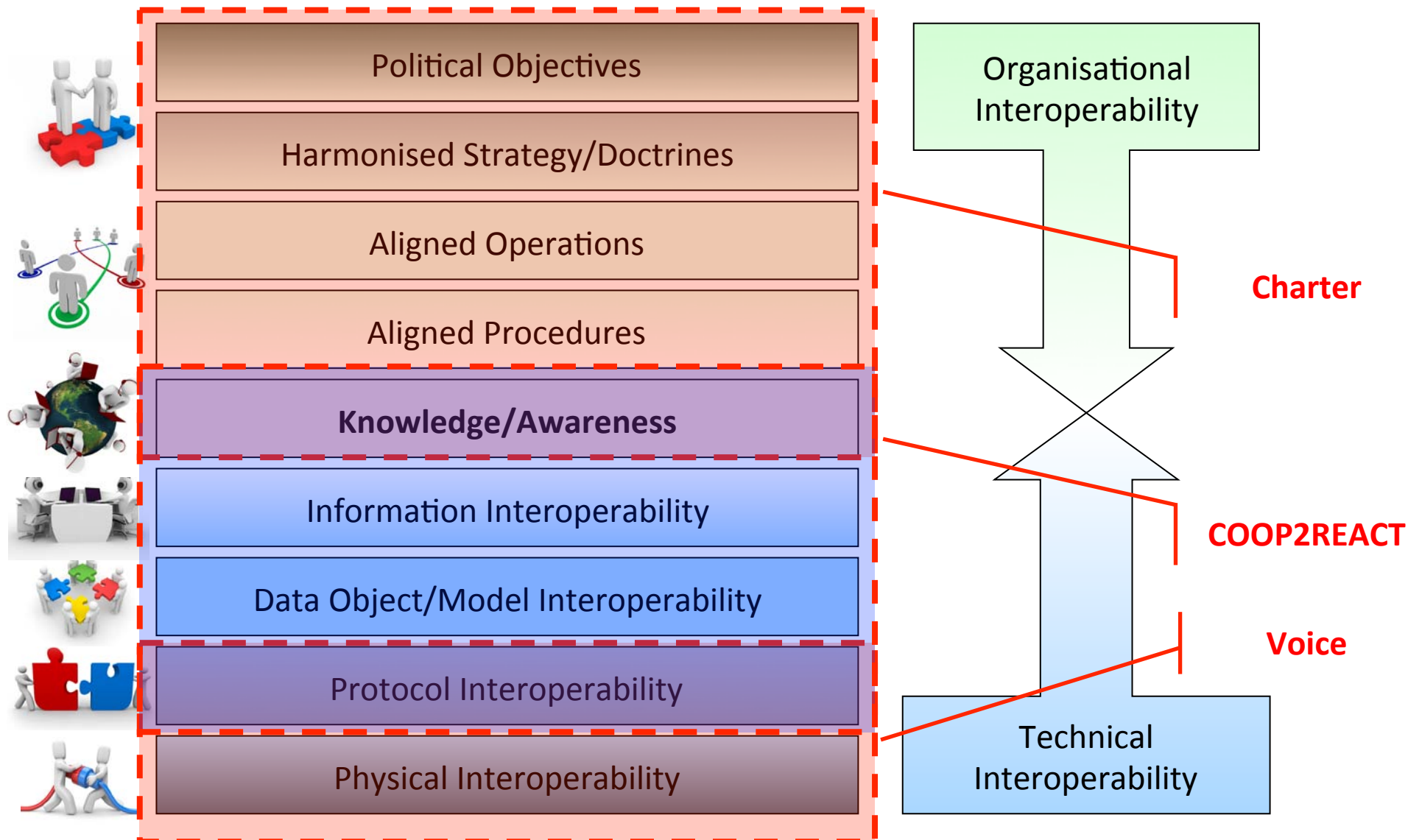
COOP2REACT: architecture



COOP2REACT: architecture



COOP2REACT interoperability layers



COOP2REACT: Open standards

Non-proprietary standards allow all emergency Services to adopt them without costs for licensing or special tools:

- CAP (Common alerting Protocol) used for structuring information in an XML file
- Italian CAP Profile for the further definition of additional information fields
- ATOM FEED as distribution mechanism of CAP messages in a many-to-many distributed architecture



COOP2REACT: what is available upon signing an agreement with CNVVF

- A web application (CAPGenerator) for creating CAP messages.
- An access to a Routing application (CAPRouter – installed on CNVVF servers) for creating and distributing ATOM FEEDs with CNVVF (and only with CNVVF)
- A web application (CAPReader) for retrieving and visualising CAP messages in text format (no integrated map available)

COOP2REACT: what organisations can do further

- Integrate CAP-generating functionalities into their existing Command and Control Centres (like CNVVF have done with their SO115 application)
- Purchase (as full license or as a service) or develop personalised applications for:
 - Generating CAP messages (e.g. a personalised license of the CAPGenerator)
 - Distribute ATOM FEEDs to any Emergency services (e.g. a personalised license of the CAPRouter)
 - Visualise CAP messages as both text and georeferenced points on maps (e.g. a personalised license of the CAPViewer)
- All these functionalities made easy and operable thanks to the adoption of standard open protocols

COOP2REACT: possible new service/functionalities

Being based on open standards, further specialised application can be designed, implemented and integrated. Generating, retrieving, displaying and analysing CAP messages can be adapted to several different scenarios:

- Multilingual Interfaces
- Geographic or thematic Integrations
- Applications for mobile devices
- Icon interfaces (e.g. 115-4-DEAF)

A final note

With this presentation we have gone through:

- How the first research and trials were carried out in the REACT EC project
- What CNVVF have implemented for supporting data sharing with other Emergency Services
- COOP2REACT and how it can be adopted by all

What is in front of us are a lot of opportunities for improving cooperation and leveraging the quality and efficiency of Emergency management.

Let's make this happen!