

The Apulia Region “S.IN.A.P.S.I.” IT System and the European FP7 “C2SENSE” project: two operative contest for CAP applications

CAP Implementation Workshop 2017

21 September 2017

Marianna Cavone



Two operative contest for CAP applications in Apulia Region:

- ❑ **S.IN.APSI** (Integrated System of Analysis, Provision, Surveillance and Information) Project (funded by regional action) is promoted by the **Civil Protection Section of Apulia Region** in agreement with "in house" regional society **InnovaPuglia**, with the role of project supervisor for the definition of the final design and subsequent implementation. The system was developed by SYSMAN Progetti e Servizi S.r.l (www.sys-man.it) and SIT Servizi di Informazione Territoriale (www.sit-puglia.it)
- ❑ **C2-SENSE** (EU FP7, 01/04/2014 - 31/03/2016 GA 607729) - c2-sense.eu - The project C2_Sense (funded by european action) cover the application area of interoperability and user profiling for command and control systems in emergency management. **Civil Protection Section of Apulia Region** and **InnovaPuglia** are partner in the project



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S.IN.A.P.S.I.: Sistema INtegrato di Analisi, Previsione, Sorveglianza e Informazione (Integrated System for Analysis, Provision, Surveillance and Information)



S.IN.A.P.S.I Project helps interaction and coordination of all involved multiple organizations with different services (eg, police, medical care, rescue forces, fire fighting, volunteer organizations, etc.) in accordance with specific procedure, improving the management of the imminence or occurrence of an event that may constitute a danger for the population, territory and goods.





S.IN.A.P.S.I goals:

- ☐ Support to Decision Making Process
- ☐ Ability to coordinate actions during emergencies phases
- ☐ Availability of "intelligent" data
- ☐ Integrating content from different sources into a single stream of information in the field of Civil Protection
- ☐ Development and realization of a modern information system of the Regional Civil Protection for the planning, monitoring and emergency management (NetRisk)
- ☐ Development and realization of a navigation service and observation called (NetAnalysis) updated with real time data



NetAnalysis update in real time with information, data and events represented in iconic form of mapping, with the aim of supporting interaction and coordination of all involved during the imminence or the occurrence of an event that may constitute element of danger for the population, territory and property.

NetAnalysis interacts with internal and external components in order to acquire or disseminate data or data flows and aims to:

- integrate content from different sources into a single flow of information of mutual interest in the field of Civil Protection
- support the phases of coordination and strategic decision-making in emergency situations and in conditions of ordinary alarm

<https://sinapsi.rupar.puglia.it/>



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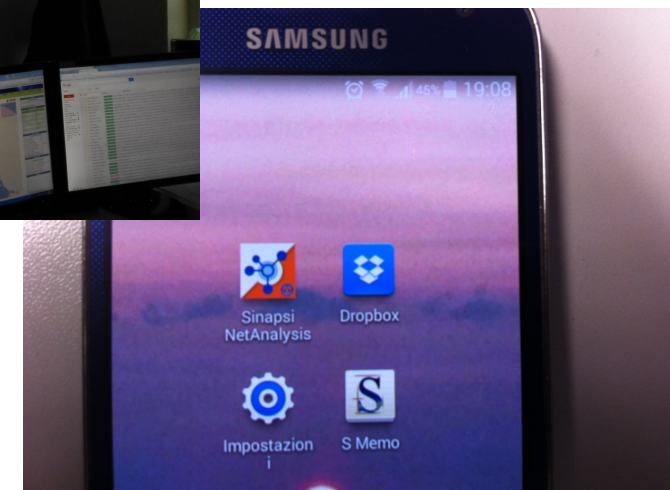


NetAnalysis provides data output / data streams in a variety of content fruition modes:

- ☐ Web-gis portal
- ☐ Log-book portal
- ☐ Feed service
- ☐ Social network

accessed through:

- ☐ pc
- ☐ tablet
- ☐ smartphone
- ☐ feed reader
- ☐ video wall





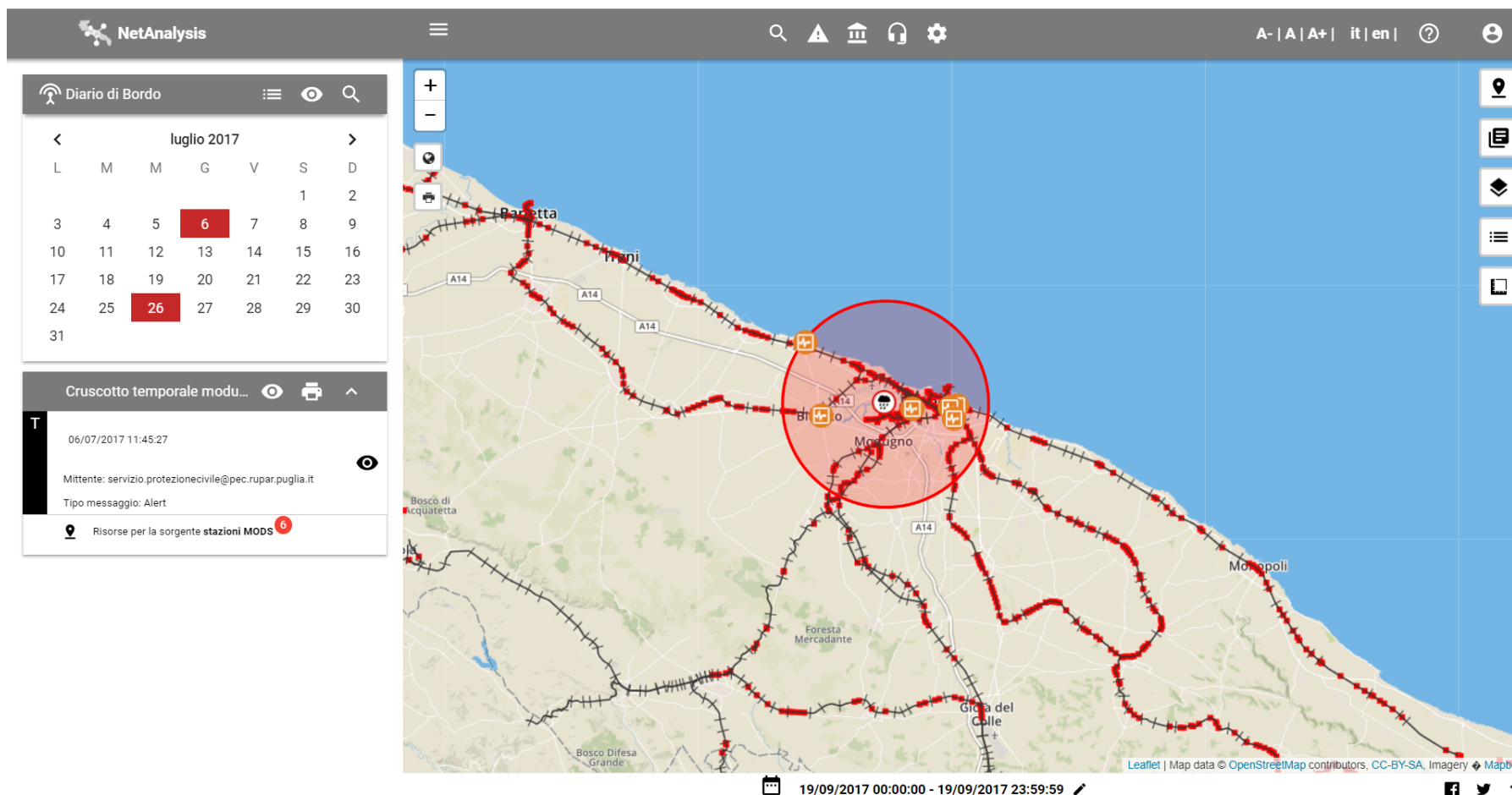
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(Integrated System for Analysis, Provision, Surveillance and Information)



S.IN.A.P.S.I. - NetAnalysis

Sistema Integrato di Analisi, Previsione, Sorveglianza e Informazione

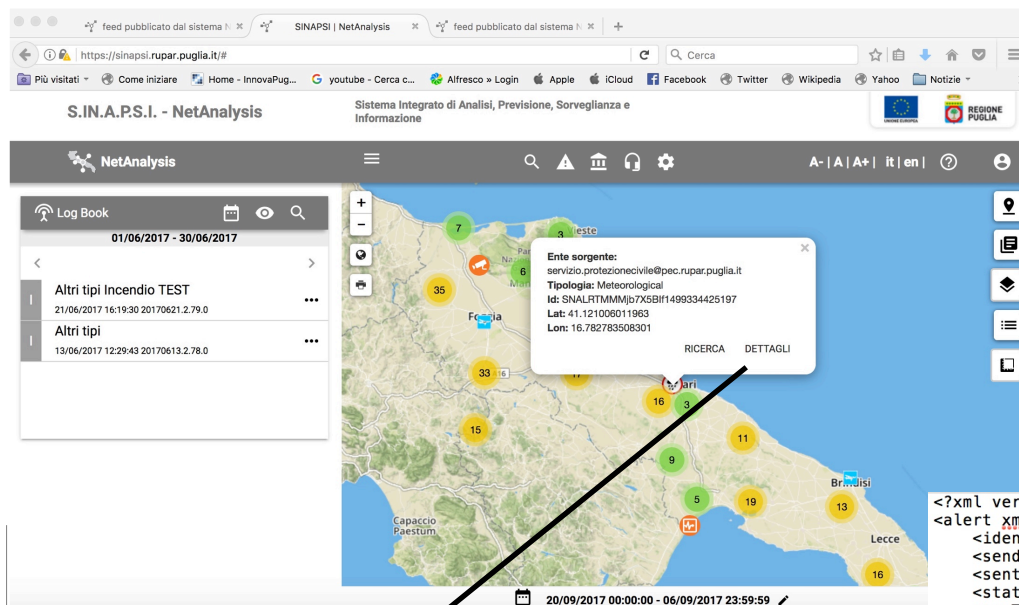


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Emergency Event

Emergency Event

Info

Identifier	Addresses	Msg Type
snalrtmmmb7x5bif1499334425197	innovapuglia@pec.rupar.puglia.it	Emergency Event

Sender	Scope	Sent	Status
servizio.protezionecivile@pec.rupar.puglia.it	Private	06/07/2017 11:45:27	Actual

Emergency Event

Info

Severity	Area				Resource	Certainty
Extreme	Description: centro bari Circle: 41.12100422338174,16.782783516682688 0.01					Observed
Description	Language	Response Type	Sender Name	Urgency	Instruction	
	it-ch	None	trlmhl87a03a662f	Immediate		
Contact	Category	Event	Headline			
	Meteorological					

CLOSE

```
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<alert xmlns="urn:oasis:names:tc:emergency:cap:1.2">
  <identifier>20170621.2.79.0</identifier>
  <sender>innovapuglia@pec.rupar.puglia.it</sender>
  <sent>2017-06-21T16:19:30+02:00</sent>
  <status>Actual</status>
  <msgType>Alert</msgType>
  <source>Utente01 INNOVAPUGLIA (INNOVAPUGLIA)</source>
  <scope>Private</scope>
  <addresses>innovapuglia@pec.rupar.puglia.it servizio.protezionecivile@pec.rupar.puglia.it</addresses>
  <incidents>innovapuglia@pec.rupar.puglia.it 20170621.2.79.0 2017-06-21T16:19:30+02:00</incidents>
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    <language>it-IT</language>
    <category>Other</category>
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    <certainty>Unknown</certainty>
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    <senderName>INNOVAPUGLIA</senderName>
    <headline>Altri tipi Incendio TEST</headline>
    <description>Incendio TEST</description>
    <instruction></instruction>
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107 Giovinazzo</web>
    <contact>InnovaPuglia</contact>
    <area>
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    </area>
  </info>
</alert>
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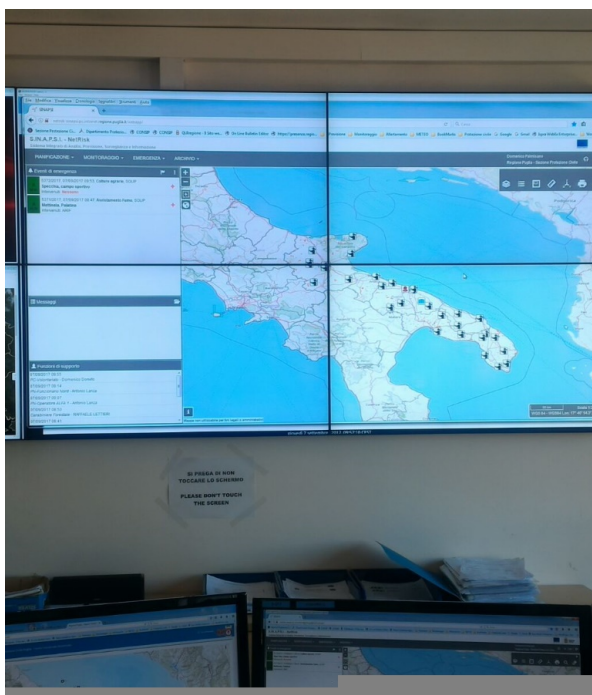
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NetRisk: information system of the Regional Civil Protection for the planning, monitoring and emergency management



S.IN.A.P.S.I. - NetRisk
Sistema Integrato di Analisi, Previsione, Sorveglianza e Informazione

PIANIFICAZIONE - MONITORAGGIO - EMERGENZA - ARCHIVIO - STATISTICHE - AMMINISTRAZIONE

Apollonia Netti
Pagine Puglia - Sezione Protezione Civile

Eventi di emergenza

- 5/07/2017, 14/09/2017 10:52, Sterpaglia, SOUP
San Giovanni Rotondo, SS 272
Interventi: Nessuno
- 5/06/2017, 14/09/2017 10:39, Albature, SOUP
Gravina in Puglia, masseria pelliccioli
Interventi: VOL
- 5/05/2017, 14/09/2017 09:50, Avvistamento Fumo, SOUP
Spinazzola, pescarella
Interventi: ARIF
- 5/03/2017, 13/09/2017 12:32, Sterpaglia, SOUP
Troia, PIP
Interventi: VOL

Map showing the region of Puglia with various locations marked.

Funzioni di supporto

- 14/09/2017 10:53
Carabiniere Forestale - RAFFAELE LETTIERI
- 14/09/2017 10:52
PC-Volontario - Rosa Anita Masi
- 14/09/2017 10:25
Vigili del Fuoco - Pasquale Antonelli
- 14/09/2017 09:29
Vigili del Fuoco - Michele Detizzo
- 14/09/2017 09:15

Eventi di emergenza

Dati evento 5/7/2017 - San Giovanni Rotondo, Monte calvo

Dati evento: Brogliaccio Interventi Aperti: 0 Chiusi: 3 Allegati

Report

5/07/2017, 07/09/2017 14:02, Involiti, SOUP
Barbarano in Colle, strada per laterza
Interventi: ARIF

5/08/2017, 07/09/2017 13:43, Sterpaglia, SOUP
Moliseano, SP 68 per Casarano
Interventi: VOL

5/08/2017, 07/09/2017 13:28, Fales, SOUP
Salice Salentino, Sp 197
Interventi: P-SUD

5/7/2017, 07/09/2017 12:52, Sterpaglia, SOUP
San Giovanni Rotondo, Monte calvo
Interventi: AEREO, VVF, DOS

5/7/2017, 07/09/2017 12:42, Sterpaglia, SOUP
Ossola del Colle, Via Giulio Pastore - Hensolen
Interventi: VOL

5/7/2017, 07/09/2017 12:28, Involiti, SOUP
Barbarano in Colle, via Lema di Spine
Interventi: ARIF

5/7/2017, 07/09/2017 12:27, Sterpaglia, SOUP
Alento, Agriturismo "I Capani"
Interventi: VVF

07/09/2017 17:49 Luco Priore (SOUP)
Messaggio: Chiediamo se può rilasciare i fire boss per martedì su casaforte. Nessuna risposta

07/09/2017 17:48 Luco Priore (SOUP)
Messaggio: DOS num cell. 320931000

07/09/2017 16:58 Augusta Capurso (SOUP)
Messaggio: 1005 sul posto richiesta intervento aereo per bonifica

07/09/2017 16:53 Luco Priore (SOUP)
Messaggio: Inviato intervento - Intervento aereo

07/09/2017 15:28 Augusta Capurso (SOUP)
Messaggio: VVF comunicano probabile ricomposizione incendio di via. Si reca sul posto una loro squadra e ci fa sapere

07/09/2017 14:39 Esameo Nardulli
Messaggio: Inviato intervento - Vigili del Fuoco - Interventi: SI

07/09/2017 14:38 Esameo Nardulli
Messaggio: Il Comando Foggia invia il dos 476 sul posto dell'evento su richiesta del caposquadra Vvf presente sul posto

07/09/2017 13:31 Esameo Nardulli
Messaggio: Inviato intervento - Vigili del Fuoco - Interventi: SI

07/09/2017 13:29 Esameo Nardulli
Messaggio: Interviene squadra Vvf di Manfredonia

07/09/2017 12:38 Gennaro Ciliberti
Messaggio: 1ha di sterpaglia comunica Dos

07/09/2017 12:37 Gennaro Ciliberti
Messaggio: 20:00 chiusura evento comunica Dos

07/09/2017 12:31 Gennaro Ciliberti
Messaggio: Il Dos, contattato per chiusura EVENTO, NON RISPONDE



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NetRisk as an emergency management system for the regional civil protection structure and for the bodies directly cooperating with it must fulfill the following functions:

- ☐ to support the intervention procedures of the Unified Permanent Operational Room of Regional Civil Protection (S.O.U.P.);
- ☐ To allow the bodies responsible (Municipal, Intercommunal, Provincial, Regional) to access to the planning data acquired at different levels;
- ☐ to support CFD-Puglia monitoring and alert features, allowing reporting of monitoring data and making available its analysis and forecasting capabilities for managing different alert levels;
- ☐ To create appropriate "dashboards" capable of transforming the single data, acquired at any stage of the process, into high added value information.
- ☐ To interoperate with NetAnalysis, setting it as a "system-provider" of information through interchange procedures by CAP protocol



C2-SENSE
The Emergency Interoperability Framework



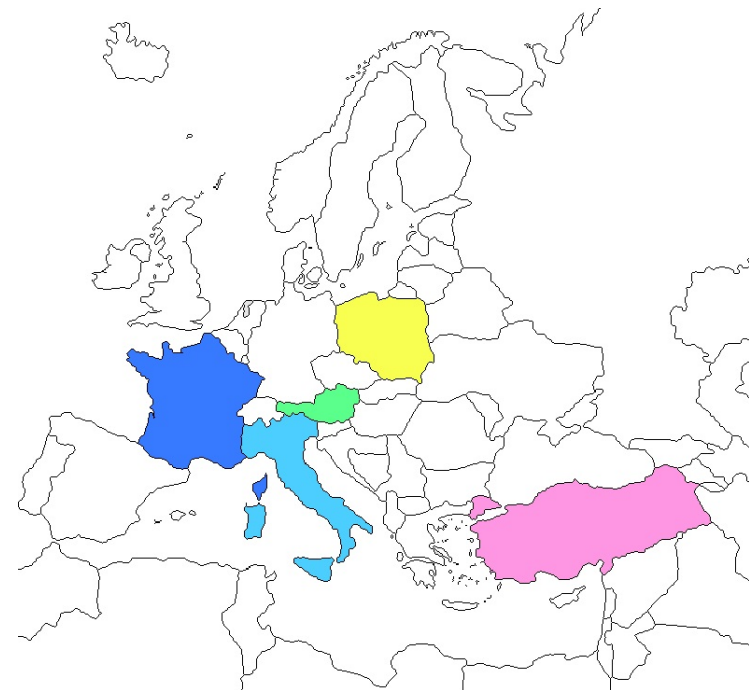
This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration.

Effective management of emergencies, crises and disasters depends on timely available, reliable and intelligible information.

To achieve this, different Command and Control (C2) Systems and Sensor Systems have to cooperate which would only be possible through interoperability.

C2-SENSE project's main objective is to develop a profile based Emergency Interoperability Framework by the use of existing standards and semantically enriched Web services to expose the functionalities of C2 Systems, Sensor Systems and other emergency/crisis management systems.

<http://c2-sense.eu/>



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C2-SENSE
The Emergency Interoperability Framework



Pilot scenario:

C2-SENSE assessed its outcomes in a realistic “Flood Scenario in Italy” pilot to ensure that the developed technologies are generic and applicable in a real life setting.

Involved organizations (with their real systems):

- Regional Civil Protection
- Prefecture of Foggia
- Province of Foggia
- Fire Department
- Municipalities
- Voluntary organizations
- Citizens
- Official regional sensor networks



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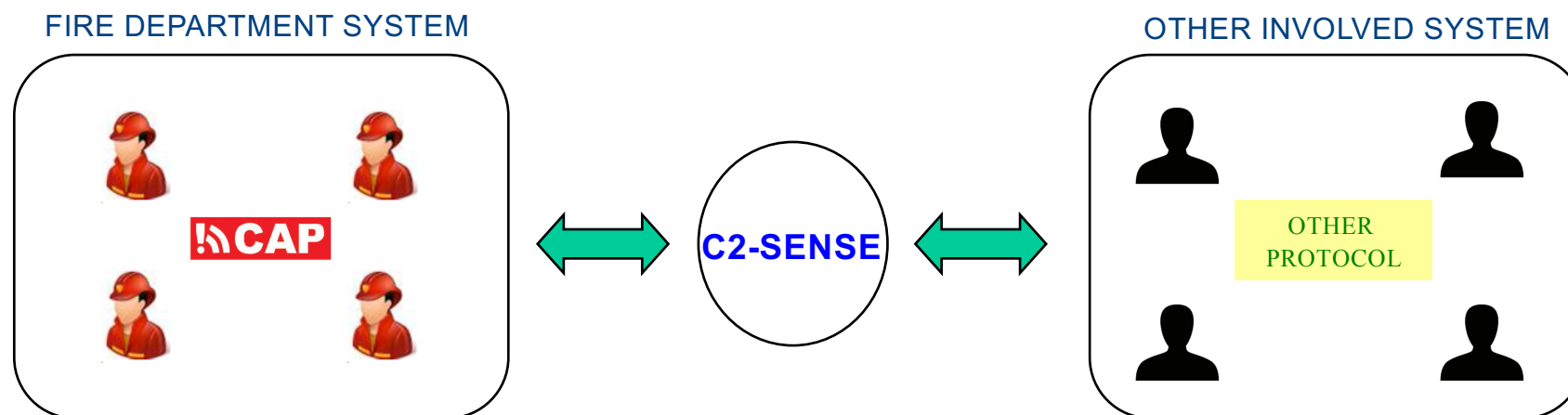


C2-SENSE
The Emergency Interoperability Framework



How:

C2-SENSE is a middle-ware that allows communication between systems that natively are not able to exchange information.





C2-SENSE
The Emergency Interoperability Framework



C2-SENSE is involved to allow message exchange from/to fire department using CAP protocol and to update SOIR (Operating Room of Civil Protection)



Dipartimento dei Vigili del Fuoco, del Soccorso Pubblico e della Difesa Civile (INTEROPERABILITA' ENTI)

utente.temporaneo01@pec.rupar.puglia.it

MESSAGGIO	<input type="text" value="OPERATIVO"/>	STATO	<input type="text" value="CHIAMATA"/>	URGENZA	<input type="text" value="Non determinata"/>	Intervento rilevante	<input type="text" value="NO"/>
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INVIATO	<input type="text" value="04/05/17 15:06"/>	MITTENTE	<input type="text" value="INNOVAPUGLIA"/>	OPERATORE	<input type="text" value="Utente01 INNOVAPUGLIA (INNOVAPUGLIA)"/>	DESTINATARIO	<input type="text" value="innovapuglia@pec.rupar.puglia.it+2"/>
STATO	<input type="text" value="CHIAMATA"/>	SQUADRA ASSEGNATA	<input type="text" value=""/>	SQUADRA SUL POSTO	<input type="text" value=""/>	INTERVENTO CHIUSO	<input type="text" value=""/>
ALLE	<input type="text" value="04/05/17 15:05:36"/>	EVENTO	<input type="text" value="Altri tipi"/>	TIPOLOGIA	<input type="text" value="Altri tipi"/>	DETTAGLIO	<input type="text" value="TEST CAP"/>
SQUADRE ASSEGNATE Nessuna squadra assegnata							
INDIRIZZO	<input type="text" value=""/>						
OGGETTO	<input type="text" value="Altri tipi Invio squadra antincendio presso stazione servizio ENI di Lesina"/>						
NOTE INTERVENTO	<input type="text" value="Invio squadra antincendio presso stazione servizio ENI di Lesina"/>						
NOTE OPERATORE (riservate)	<input type="text" value="Allontanare la popolazione, mettere in sicurezza la zona"/>						
CONTATTO	<input type="text" value="VVFF"/>	TELEFONO	<input type="text" value=""/>				
Dettagli completi		Mappa		Modifica/Rispondi		Chiudi	



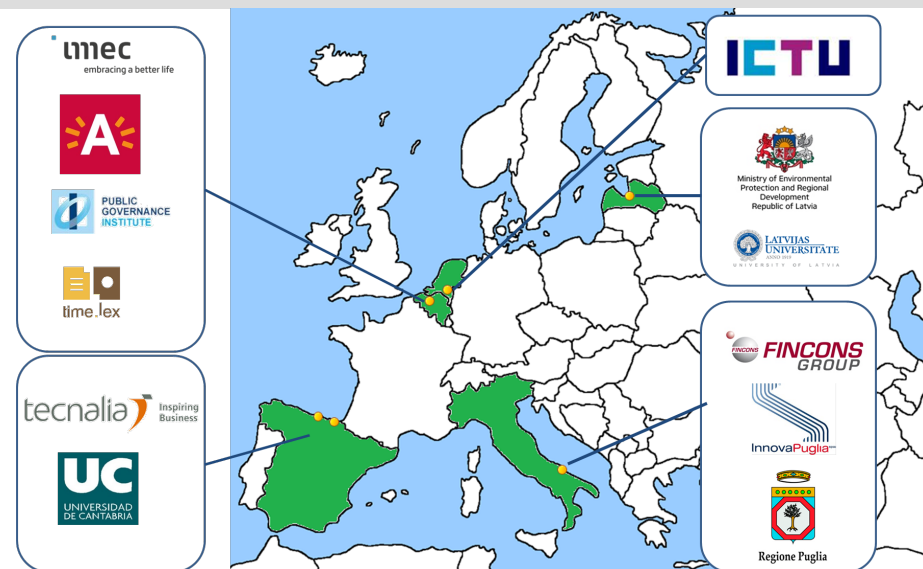
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Empowering **Citizens** to **Trasform** European **Public Administrations**

CITADEL is focused on transforming the public sector to make more efficient, inclusive and citizen-centric public services that identify/capture new or unsatisfied needs more quickly and satisfy them more effectively and in an inclusive way, providing also guidelines and features to support new processes.

CITADEL has received funding from Union's Horizon 2020 research and innovation programme.



CITADEL's mission will be realized by achieving the following objectives:

- To analyse information coming from different sources to improve the effectiveness and efficiency of PAs by providing a set of recommendations to transform its processes and policies.
- To incentivize the co-creation of digital public services by empowering citizens and PAs.
- To increase the participation of Citizens in the Public Administration system by improving their experience when using digital public services.
- To facilitate the use of the digital public services integrating the previous results into the CITADEL Ecosystem, containing the ICT enablers.
- To validate the CITADEL ecosystem in local, regional and national environments.

www.citadel-h2020.eu



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Thanks

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www.innova.puglia.it

<http://www.protezionecivile.puglia.it/>