



## ISITEP intro and overall scope of research program

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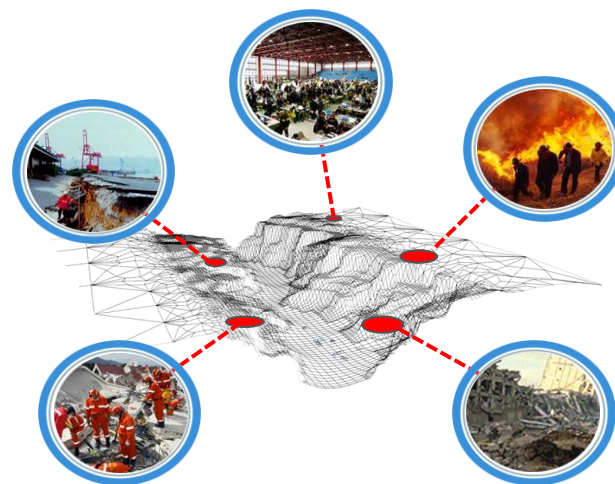
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## The **ISITEP** Project

### Inter **S**ystem **I**nteroperability for **T**Etra-tetra**P**ol networks

- Seventh Framework Programme - TOPIC SEC-2012.5.3-4: Global solution for interoperability between first responder communication systems
- Total cost of over 15 million Euros
- 36 month length: 1/9/2013 – 31/8/2016
- Consortium of 15 partners from 10 countries



*ISITEP: Interconnecting forces beyond the borders*

- European Countries exposed to **increasing cross-border crime**
- **Growing impact** of natural disasters in the last decades:
  - Financial costs double every 12 years; in 2011, 300 natural disasters with 27,000 deaths and 380 billion Euros of damage (source United Nations Office for Disaster Risk Reduction )



- **National Budget** for Public Protection and Disaster Relief (PPDR) mainly **decreasing** due to economic downturn in the last years
- **National resources** mainly **limited** for large-size events



- *Pressure for **more efficient** and **cost effective** usage of available PPDR resources*



.... *Moreover ...*

- **International crime** (drugs, human trafficking, smuggling...) requiring **joint police operations** on the field:
  - cross-border pursuit of criminals, cross-border patrols and controls, joined investigation teams, international observations, controlled deliveries.
- In **Disaster Relief**, PPDR resource demand often concentrated in **unplanned time** frames different across Countries and
  - the more the cooperating resources available on the field, the more the effectiveness (e.g. less casualties, ...)



- *European Union shall mobilize Member States resources to assist other Member States in case of terrorist attacks or in case of natural/man-made disasters*  
*(Lisbon Treaty)*



- European **cross border Police cooperation** is an effective/required approach for improving citizens' security
- **Sharing resources for Disaster Relief** at European level improves effectiveness of fire fighting, civilian protection, medical and rescue operations



- **Cooperation on the field requires:**
  - Interoperable communications
  - Jointly agreed procedures
  - bi/multilateral agreement in place



- A European approach is now **feasible** due to:
  - Reduced cost and risks in technical implementation
  - Procedures and agreements harmonization underway among countries
  - Strong support at European level (e.g. Schengen acquis, Prüm treaty, European Research Council (ERC), ...)

- Provide **interoperability** among PPDR resources of ISITEP federated Countries overcoming current operational and technological barriers;
- allow **migration** of PPDR resources with their own terminals;
- simplify the **entrance of new Member Countries** into the ISITEP European network;
- enable **cooperation** on the field through a new generation of smart PPDR terminals empowered with PPDR applications;
- sustain **open knowledge** on PPDR procedures and technologies through public specifications and protocols for networks and terminals suitable also for future networks;
- define a **business model** sustaining interoperability implementation at European level.

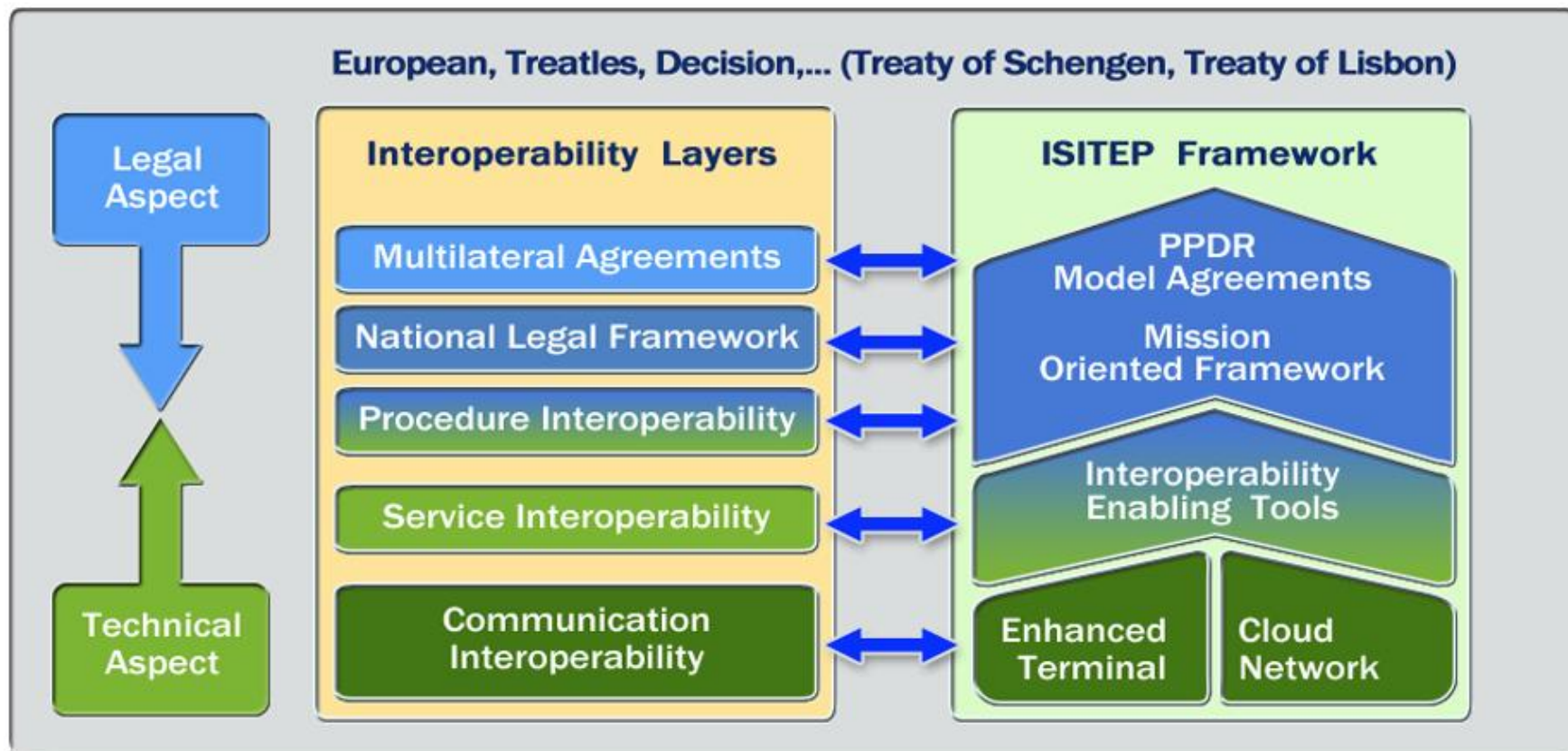


- Realize **a future-proof** pan-European framework for the integration of different Public Protection & Disaster Relief (PPDR) national organizations, merging communications technology, operational procedures and the legal framework
- Deliver operational procedures, functional models and legal agreement in an integrated European communication network framework with new smart terminals





- Interoperability on the field can be achieved **addressing coherently all the legal-technical «layers»** involved in PPDR operations





**ISITEP will deliver a framework** with four components:

### **A Mission oriented framework :**

- A standardized model for the business processes and workflows required in main PPDR interoperability events harmonizing procedures and technology and taking into account procedures and legal agreements
- The model will be based on the inventory from the European working groups that study the best cooperation standards and practices to carry out these missions, and will use as main reference the Norway-Sweden example

### **A European Inter System Interface (ISI) cloud network**

- This network integrates the PPDR national/regional infrastructures to allow roaming capability services and associated applications within a secure framework
- This capability is obtained interconnecting networks through proper TETRA-TETRA, TETRA-TETRAPOL, TETRAPOL-TETRAPOL gateways based on evolution of ETSI ISI standard

## The European PPDR Integrated Network

Procedures, multilateral agreements



Interoperability Enabling Tools

Pan-European network integrating all four types of European national PPDR network

### Enhanced User Terminals

- The enhanced terminal includes a new programmable terminal connected to existing Tetra-Tetrapol terminals.
- For an effective communication interoperability on the field, minimum functions are to be implemented at terminal and network level, e.g location assisted roaming, function based numbering, location dependent call, certified short message order application, translation engines, Workflow manager, Adaptive user interface, a common framework for application development

### Supporting tools

- Infrastructures dimension tool based on statistics of PPDR events
- Training and simulation tools
- Business sustainability tool for ISI delivery, for estimating savings from cooperation through the ISITEP interoperability framework

- **End users Partners**

- Service Public Federal Interieur / Belgian Federal Police (BFP)(BFP, BE)
- Norwegian Ministry of Justice and Public Safety (DNK, NO)
- Swedish Civil Contingencies Agency (MSB, SE)
- Ministry of Security and Justice (VenJ, NL)

- **Industry**

- Selex ES (IT: TETRA Manufacturer/Operator)
- Motorola Solutions (DK: Tetra Manufacturer)
- Airbus Finland (FI: Tetra Manufacturer)
- Airbus FR (FR: Tetrapol Manufacturer)
- Amper Sistemas (ES Tetra-Tetrapol integrator)

- **Research Center**

- TNO (NL)
- University of Rome Tre (IT)
- UPC (ES; Universitat Politècnica de Catalunya)
- ISCOM (IT; Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione)

- **SMEs**

- Net Technologies (GR: Tetra R&D and consultancy)
- Exprivia (ES; Software R&D)

## Advisory board

- Brussels Police (Belgium)
- Belgian Civilian Protection (Belgium)
- Ministry of Interior (Bulgaria)
- JRC (European Joint Research Center)
- Gendarmerie (France)
- Federal Agency of Radio (Germany)
- Ministry of Citizen Protection (Greece)
- TCCA (TETRA + Critical Communications Association)
- National Centre of Emergency (Norway)
- Guardia Civil (National Police Spain)
- Federal Police (Switzerland)
- Federal Office for Civil Protection (Switzerland)
- National Police (Sweden)
- State Security (Belgium)

End of Presentation