



ISITEP

European Interoperability in Public Safety,
Emergency and Disaster Relief

*PSC Europe Forum Conference
29 November 2012, Rome, Italy*

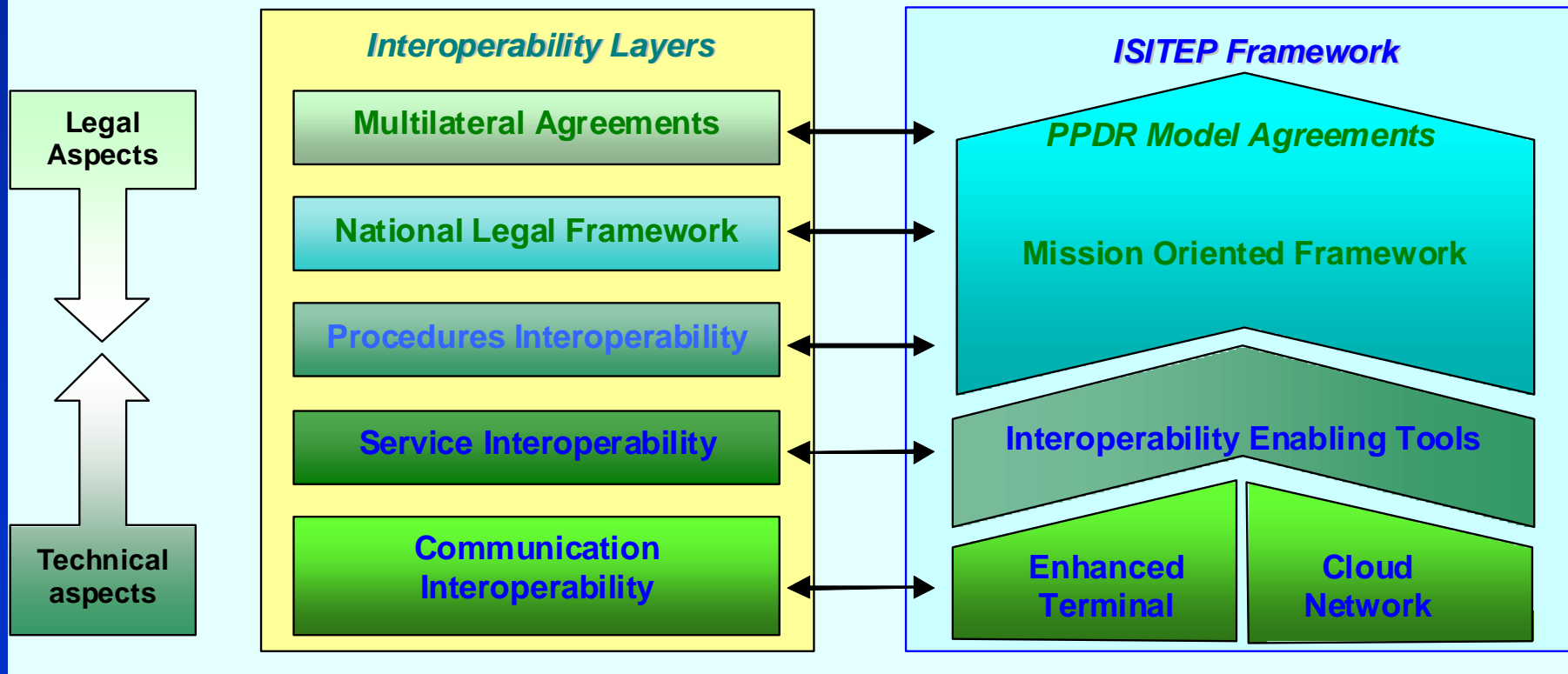
- Police cross-border cooperation is a European priority for improving citizens' security
- **Sharing resources** at European level improves effectiveness of fire fighting, civilian protection, medical and rescue operations
- Cooperation on the field requires that the four Public Protection and Disaster Relief (PPDR) national communication network types that exist in Europe are **interoperable**.

- **A European approach is feasible due to:**
 - Reduced cost and risk in implementation:
 - **using an IP based** evolution of current standard and terminal hardware technology
 - leveraging existing know-how from all the PPDR network manufacturers.
 - **Strong demand of end users** to be connected in foreign countries to enable new cooperation processes

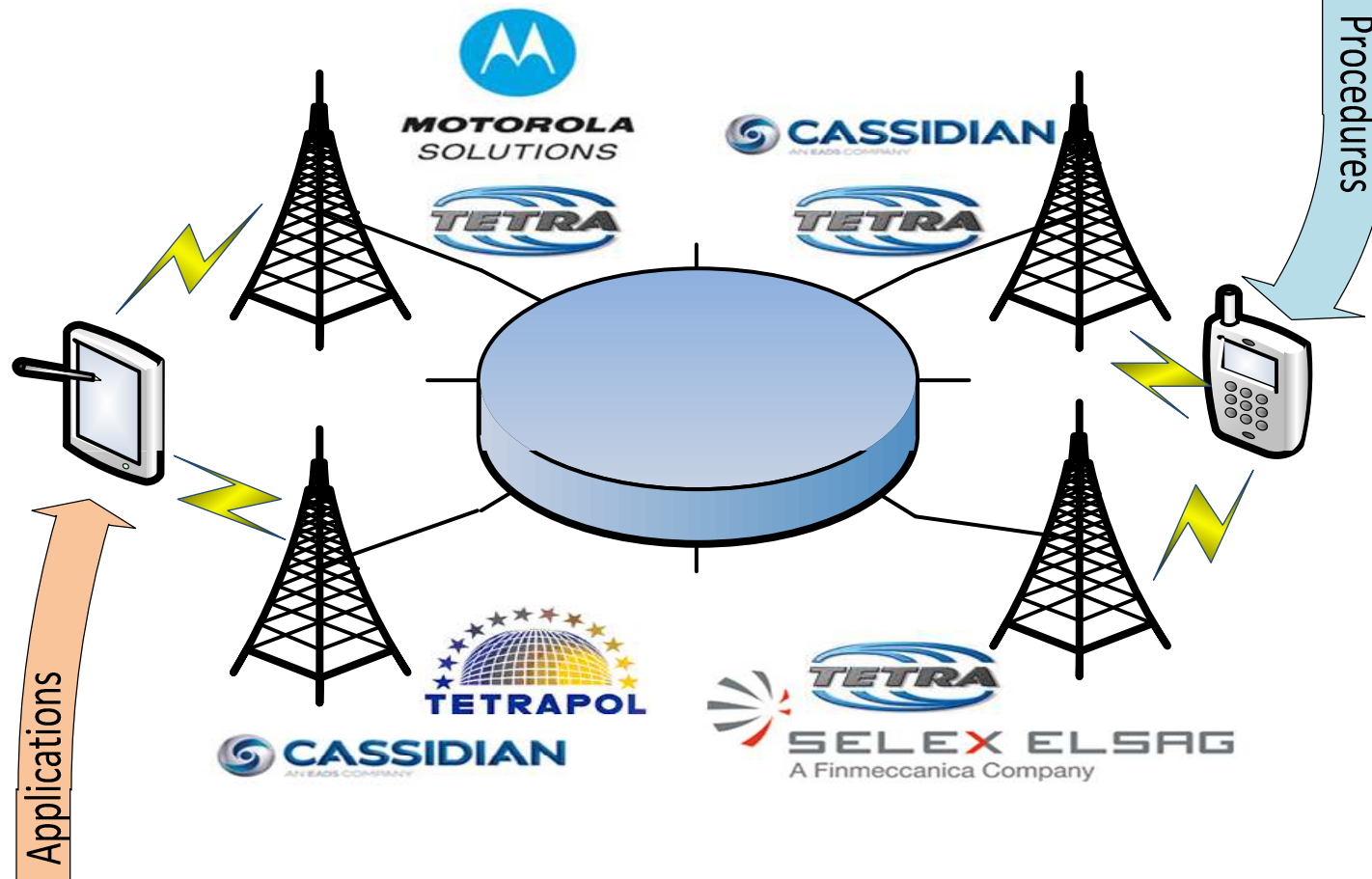
- Objectives of the project:
 - Achieve an **operational interoperability** among European first responders both at regulative, organizational, operational and at technical level
 - **Standardize** the technical improvements obtained by the ISITEP project in the European body, study the scalability of the ISI prototypes at European level, submit its functional model to the specialized European agencies (LEWP, Frontex...)

- Vision:
 - ISITEP project will allow first responders of European ISITEP federated countries to seamless **PPDR interoperability** overcoming current legal operational and technological barriers
 - **New European entrants** will be easily federated into the ISITEP European network to achieve seamless interoperability

European Treaties, Decisions, ... (Treaty of Schengen, Treaty of Lisbon)



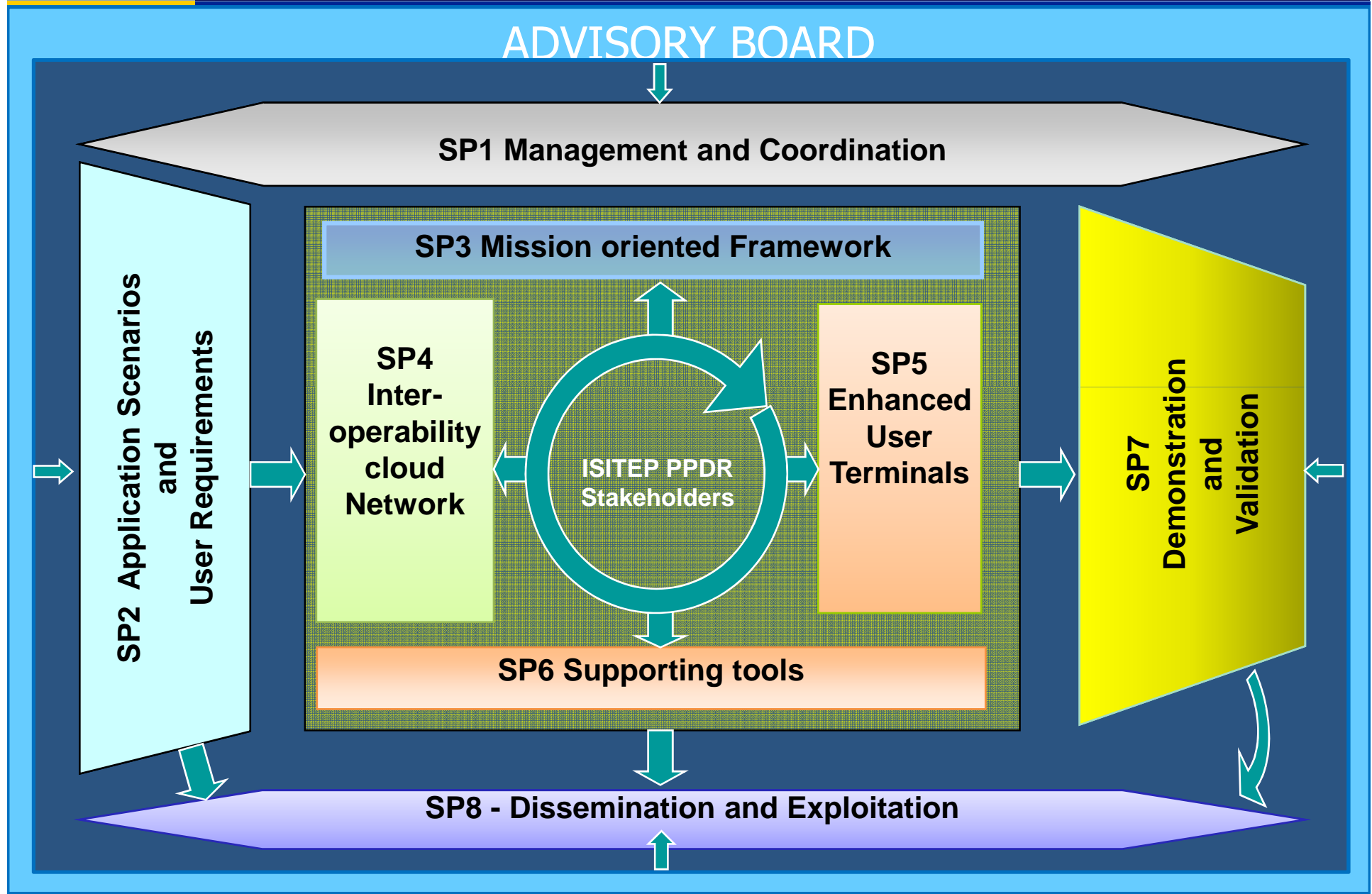
Procedures, multilateral agreements



Interoperability Enabling Tools

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

Sub Project Structure



- The **ISITEP framework** is then constituted by four components:

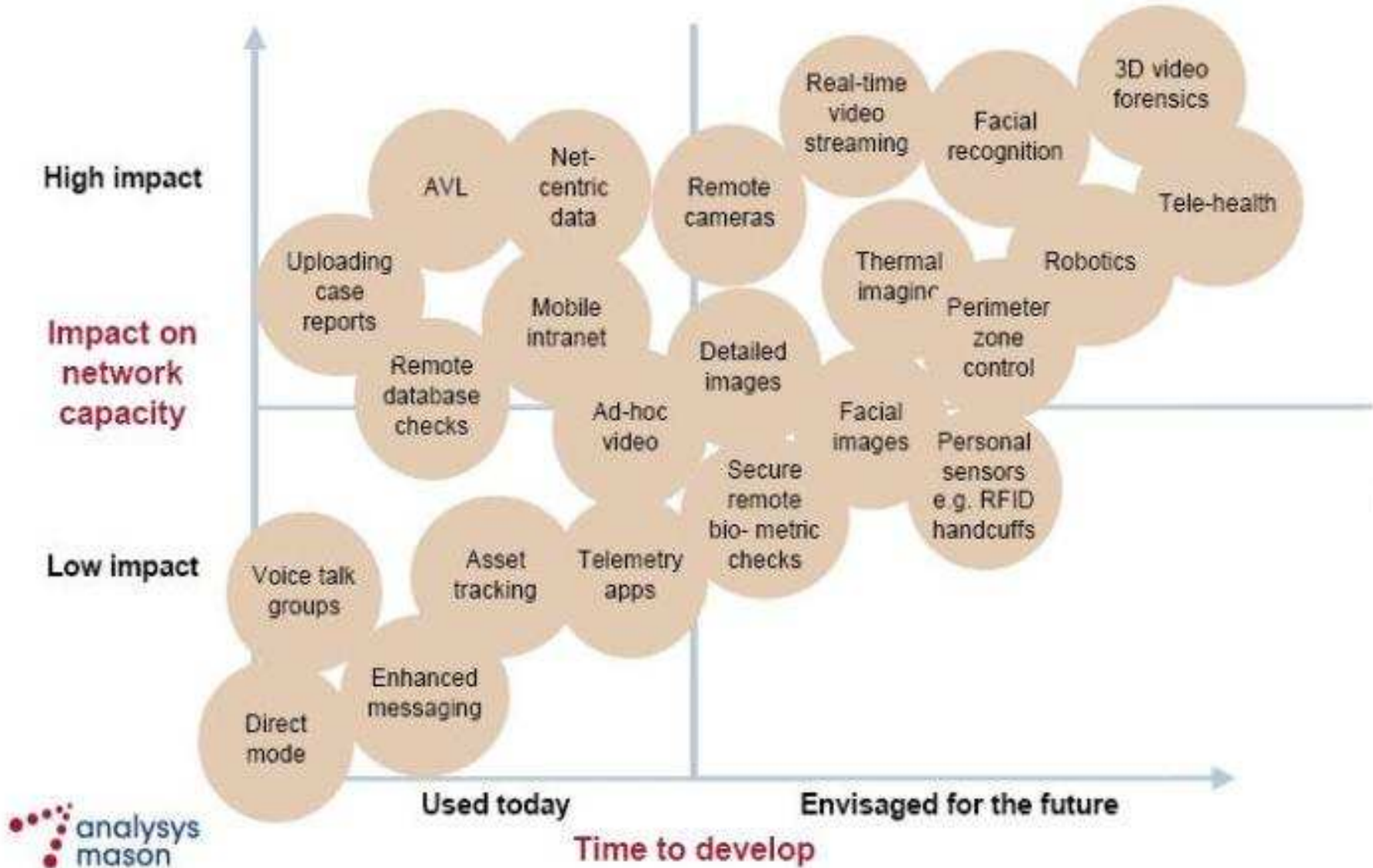
1) A **Mission oriented framework (SP3)**:

- A standardized model for the business processes and workflows required in main PPDR interoperability events harmonizing organizations, procedures and technology
- The related functional radio model defining the international radio user/group profiles and the communication and information procedures to be performed in real time during joint operations.

2) An **European Inter System Interface (ISI) cloud network (SP4)**:

- 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 gateways based on ETSI ISI standard and to an IP based evolution.

Professional Service: today and in the future



3) Enhanced User Terminals (SP5):

- 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:
 - 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

4) Supporting tools including (SP6):

- A Infrastructures dimension tool based on statistics of PPDR events
- A Training and simulation tool
- A Business sustainability tool for ISI delivery
 - This tool will allow estimating savings from cooperation through ISITEP interoperability framework

- A new **public protocol specification** (ISI over IP) will be developed for ETSI **standardization**
- The adoption of enhanced terminals and the **new gateways** will allow the ISITEP project to demonstrate the integration of all the four existing types of national networks with reduced Opex/Capex.
- The enhanced terminals new architecture will allow development of **bi-technology terminals** at competitive prices
- A **new public PPDR protocol stack** at terminal level will be derived to adapt interface to users for terminal usage abroad. The stack will allow to develop applications for PPDR users.
- The **procedures** for manufacturers InterOperability Certification (**IOP**) will be released for both terminals and network components to reduce deployment time.
- European PPDR operators will have **roaming**. Their enhanced terminals will be connected in cross border operations within the agreed framework of procedures.
- The ISITEP PPDR end users will develop **new operational procedures** to enable interoperability.

■ Industry

- SELEX Elsag (IT: TETRA Manufacturer/Operator)
- Motorola Solutions (DN: Tetra Manufacturer)
- Cassidian (FI: Tetra Manufacturer)
- Cassidian (FR: Tetrapol Manufacturer)
- Amper (ES Tetra-Tetrapol integrator)

■ Research Center

- PSC-E (EU: Public Safety Communication Forum)
- TNO
- University of Rome Tre
- UCAT (ES: University of Catalunya)

■ SME

- NETGR (GR: Tetra R&D and consultancy)
- Devoteam (ES; Software R&D)

■ End users Partners

- Belgian Federal Police (BFP)
- WM: DNK Norway (Tetra operator) and Ministry of Interior (MoI) (V&J)
- Sweeden Police (MSB)
- Netherland Ministry of Interior

■ Advisory board

- Brussels Police
- Ministry of Interior Belgium
- Ministry of Interior Bulgaria
- JRC (EU: Joint Research Center) (EU)
- Gendarmerie France
- Federal Agency of Radio..(DE)
- MInistry of Citizen Protection (Greece)
- The Tetra Association
- National Centre of Emergency (Norway)
- Guardia Civil (ES national Police)
- Switzerland Federal Police
- Federal Office for Civil Protection

Scheduling

