# D1.2. – Report on the Definition of the Generic Users Requirements

PSCE – Forum

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#### Outline of the document

- 1. Executve summary
- 2. Current generic requirements
- 3. Generic user requirements adressed by TETRA
- 4. Emerging generic requirments
- 5. Conclusions
- 6. Main references
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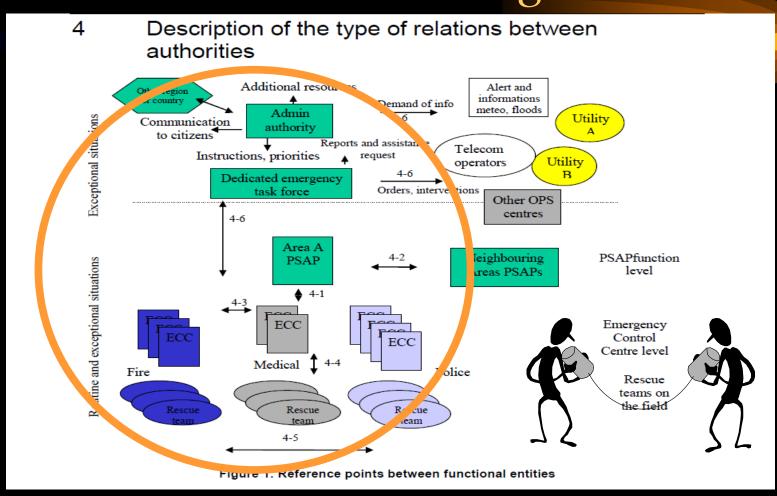
#### 2. Current generic requirements

### Typology of communication requirements:

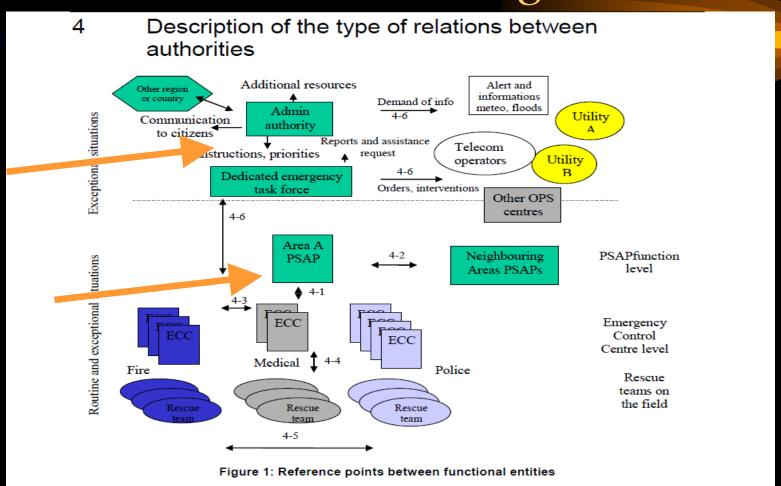
- Inside and in between authorities and organizations
- Citizens to authorities and organizations
- Authorities and organizations to citizens
- Amongst citizens



# Inside and in between authorities and organizations

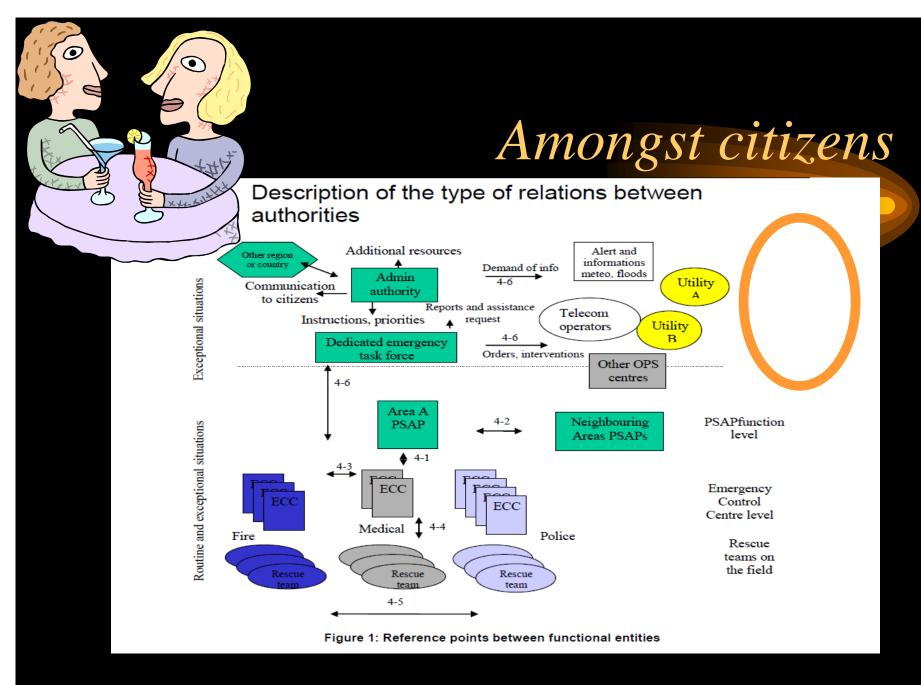


# Citizens to authorities and organizations



### Authorities and organizations to citizens

4 Description of the type of relations between authorities Additional resources меп informations Demand of info meteo, floods Admin Utility Exceptional situations Communication authority to citizens Reports and assistance Instructions, priorities Utility ope ators Dedicated emergency task force Orders, interventions Other OPS centres Area A Neighbouring **PSAPfunction PSAP** Routine and exceptional situations level Areas PSAPs **♦** 4-1 **ECC** Emergency Control **ECC** Centre level Medical 1 4-4 Fire Police Rescue teams on the field Rescue Rescue 4-5 Figure 1: Reference points between functional entities



# 3. Generic requirements adressed by the TETRA system

- Public safety
- Government
- Military
- Utilities
- Commercial and industry
- Oil and gas

- Secure (encryption)
- Group call
- Prioritisation
- Broadcasting
- PTT (fast)
- Direct mode
- Listen in
- Access to public networks
- Short data service

# 4. Emerging generic requirements

- 4.1. Generic requirements from ETSI MESA
- 4.2. Generic requirements from the User cabinet
- 4.3. Generic requirements from BAPCO
- 4.4. Generic requirements from OLES SAFECOM, and COPS (US)
- 4.5. Generic requirements from ITU-T PCP-TDR
- 4.6. Generic requirements from IETF ECRIT

# 4. Emerging generic requirements

#### General topics

- Broadband
- Sensors
- Activators
- Machine to machine

### 4.1. Generic requirements from ETSI MESA

- US and Europe see migration towards broadband!
- "Joint requirements" mean integrated solution for all agencies!!!
- NGN's as Backbones?
- Software defined radios or cognitive radio
- Pre-emption and priorities for PSC

### 4.2 Generic requirements from the User cabinet

- Avoid stovepipe systems
- Trans agencies and trans service cooperation
- Common data and imagery repositories
- Harmonized inventories of capabilities
- Simplified taskforce buildup

### 4.3. Generic requirements from BAPCO

#### Improvements on TETRA systems:

- Interoperability: Roaming, access to legacy systems, PSTN
- IP packet data
- Repeaters and gateways
- Location services
- Directory service

### 4.4. Generic requirements from OLES

OLES: Office of Law Enforcement Standards
Strives for interoperable deployments of PSC
equipments

Has decision making power on budget spending

Develops "Public Safety Architecture Framework (PSAF)" with OLES and SAFECOM

#### 4.5. Generic requirements from ITU-T PCP-TDR

- Enhanced priorities
- Secure networks
- Restorability
- Network connectivity
- Interoperability
- Reliability

- Mobility
- Ubiquitous coverage
- Survivability
- Voice transmission
- Scalable bandwidth
- Availability

Rem.: see also Next generation networks!!!!!

#### 4.6. Generic requirements from IETF ECRIT

Internet Engineering Task Force (IETF)

Emergency Context Resolution with Internet Technologies (ECRIT)

- Requirements for Citizen to Authority Communications
- Requirements for Authority to Citizens (Individuals) Communications

#### 5. Conclusions

Voice communications inside authorities in the incident area are served by TETRA coverage

- Interoperability
- Improved decision making process (IM)
- Localization
- Broadband