5G research for Safety and Security Critical Applications

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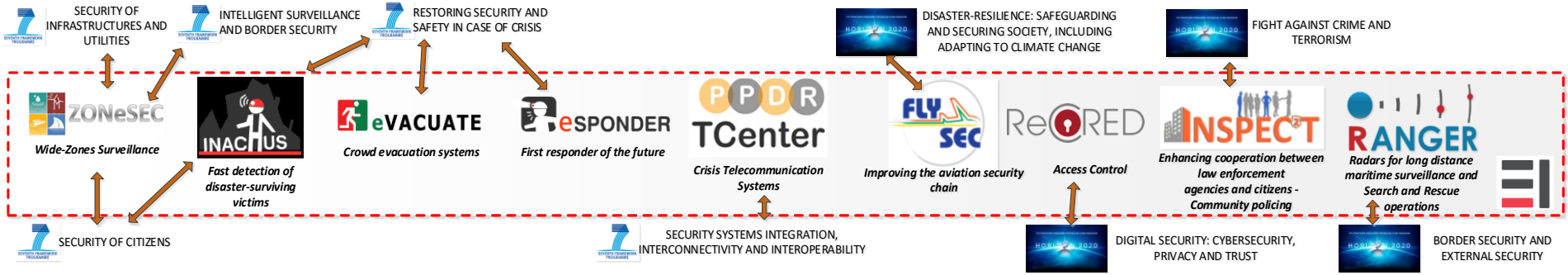
Security Research



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ICT 7 Strand 3 concept at a glance

Secure and privacy-enabled network operations **for critical 5G-enabled infrastructures**

The **developed Security and Privacy Enablers** will be able to **enhance the reliability of network operations** for European critical infrastructures with:

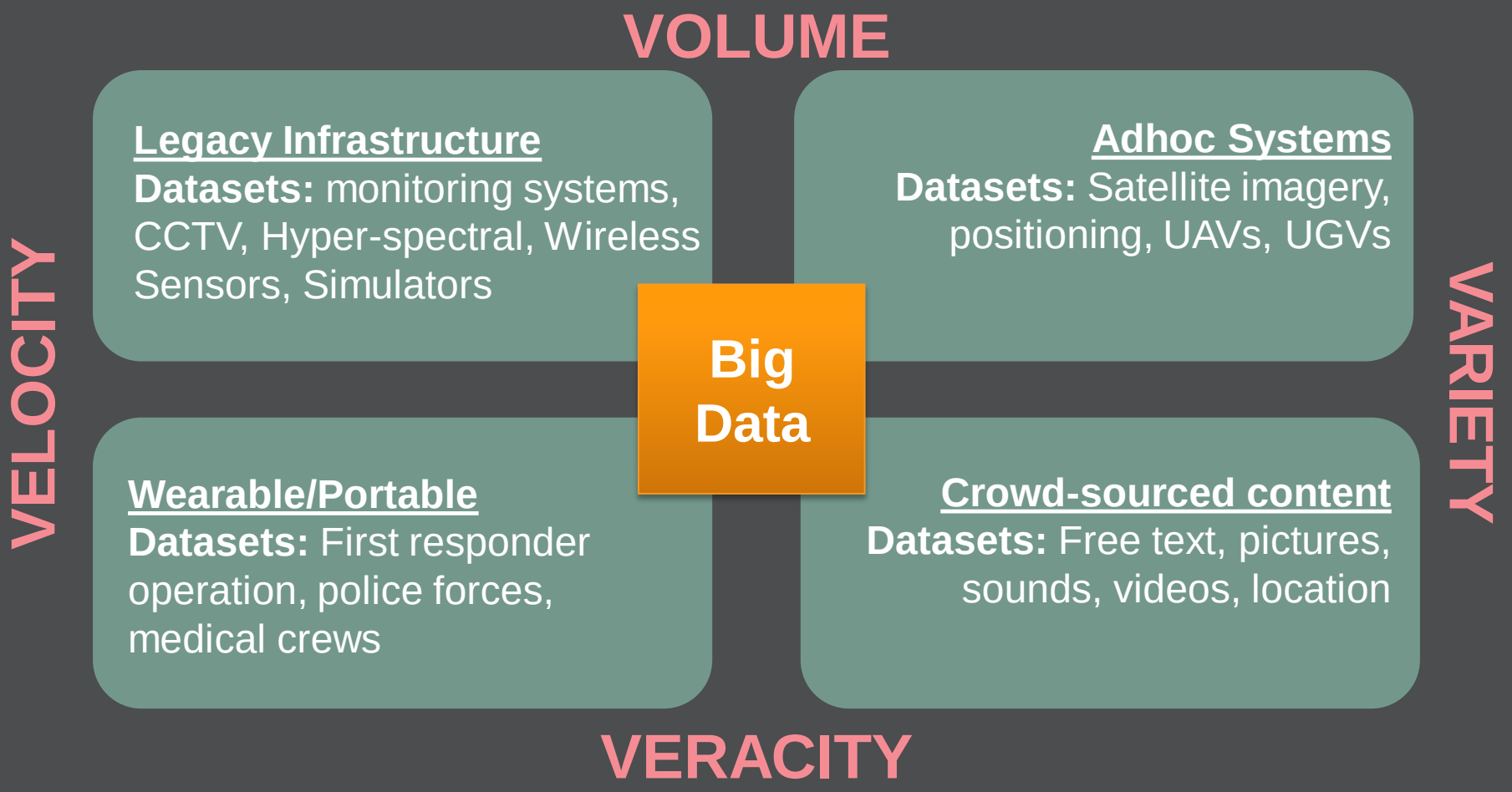
- Privacy-based analysis of access and IoT protocol designs and implementations catering for the development of privacy enablers
- Personal network data processing ecosystem for home and roaming 5G services
- Optical PUF (Physical Unclonable Functions) with novel photonics concepts for device authentication or dynamic key generation at wireless access points
- Scalable privacy through anonymization techniques for inter-domain control and management

Ultimate goal:

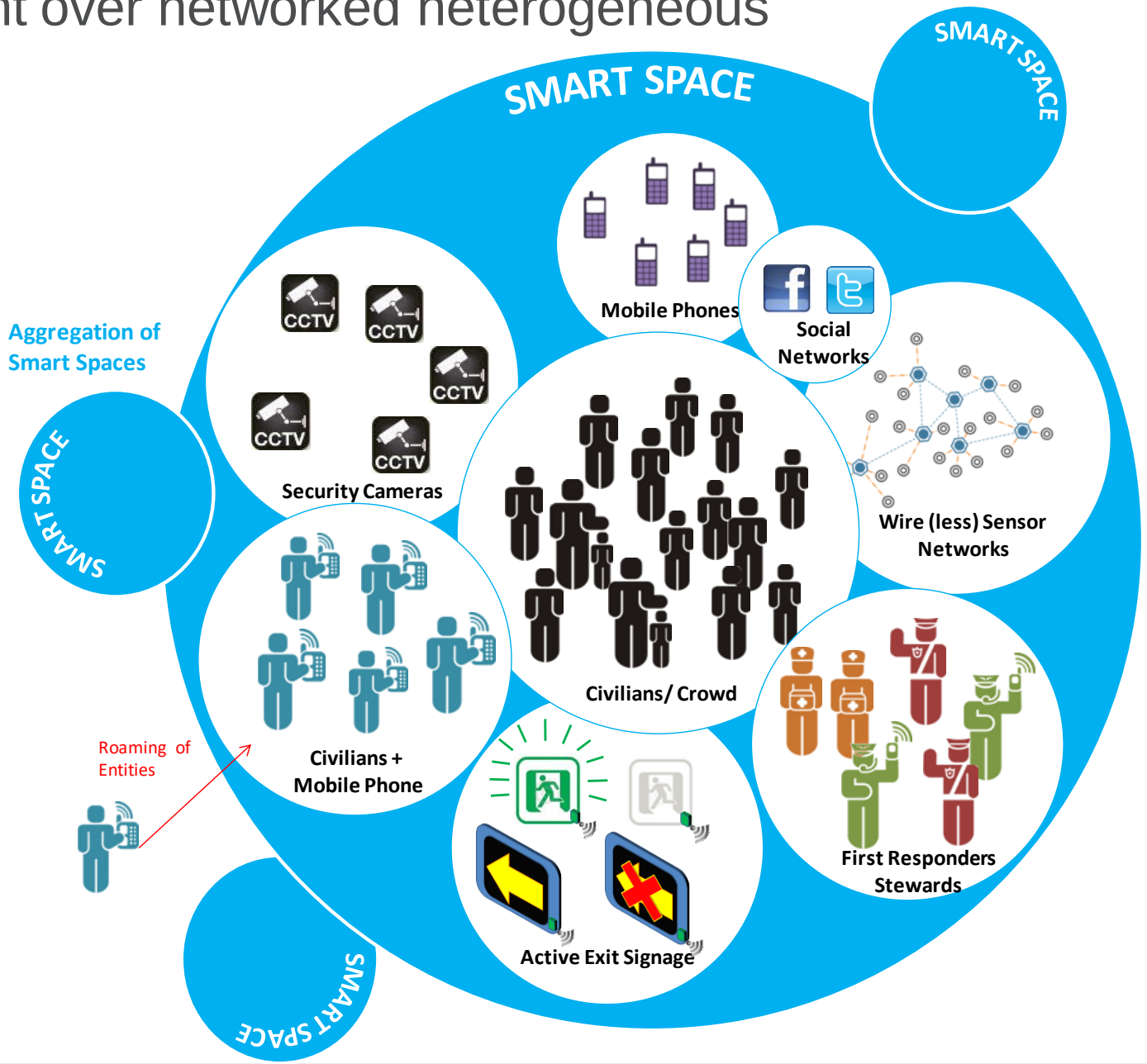
Ultra Safe and Privacy Preserving 5G network operations for critical applications

Trying to grasp what is going on

Common Operational Picture



Slice management over networked heterogeneous resources



Key Activities and Partners

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Pilot 4:
Evacuation of a metro station

Pilot 1:
Evacuation of a football stadium

Security and Privacy cross domain 5G Enablers

Pilot 3:
Evacuation of an Airport Terminal

Pilot 2:
Emergency healthcare provisioning

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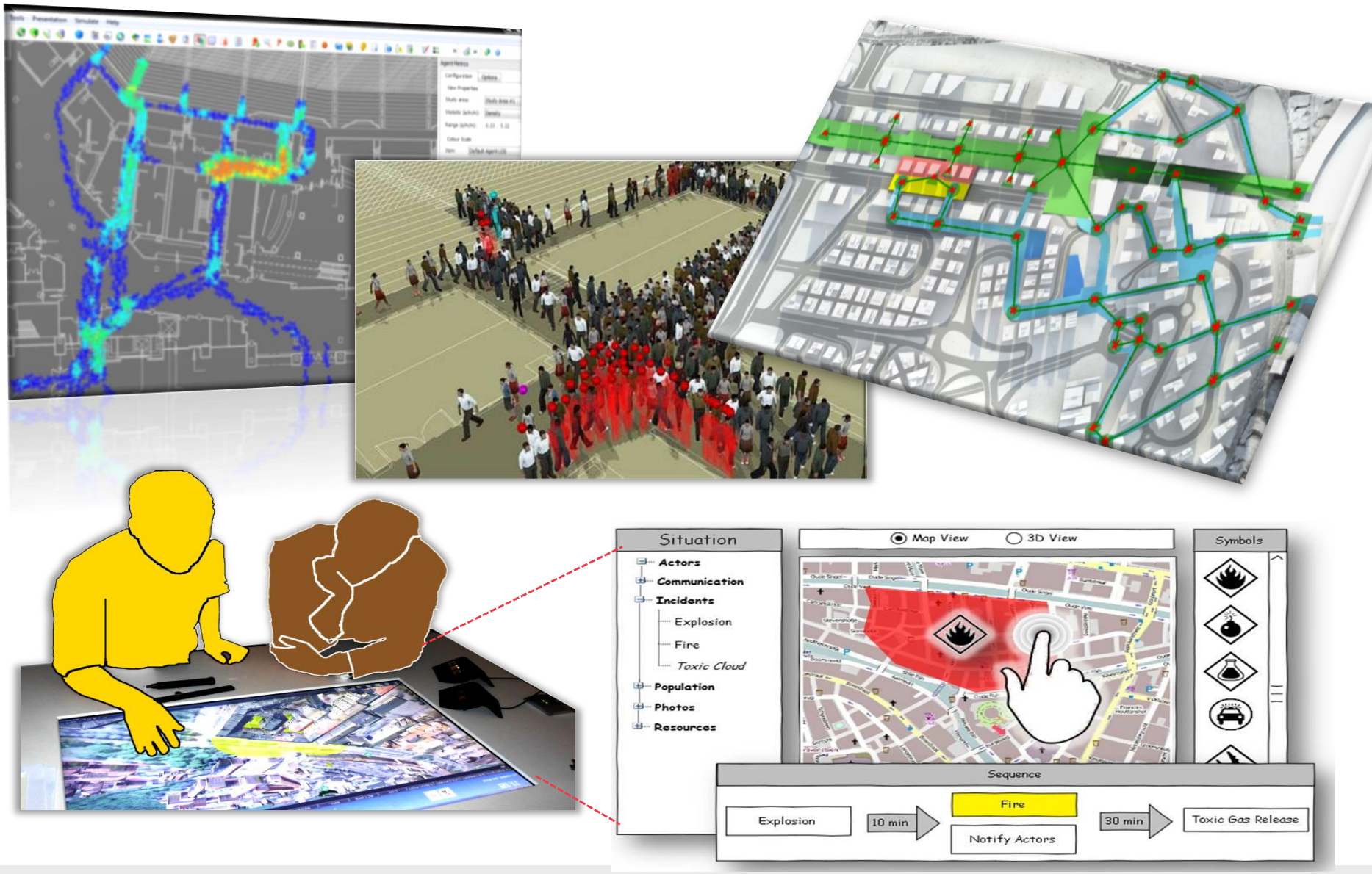
Full-fledged demonstrations



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