



## **Secure and Trusted Paradigm for Interoperable eHealth Services**

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EEMA's 30<sup>th</sup> Annual Conference

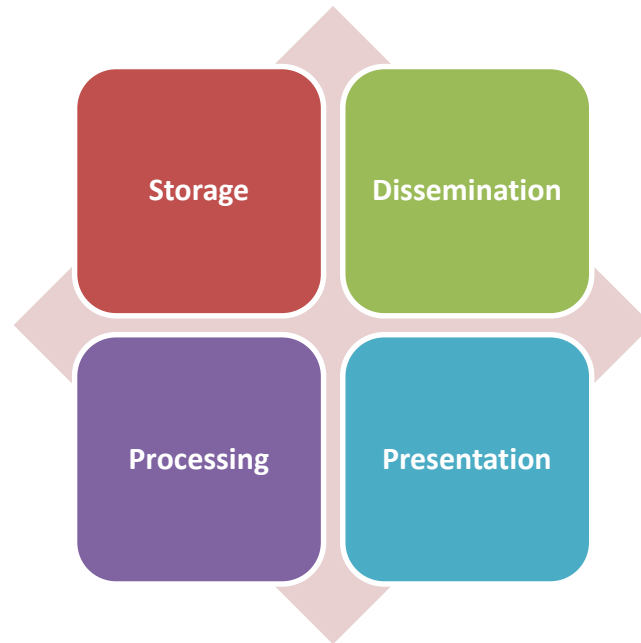
4<sup>th</sup>-5<sup>th</sup> July 2017, London, UK

# KONFIDO means “Trust” in Esperanto

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## Our vision

Develop a **holistic** solution for **interoperable** and **secure** eHealth services at European level



## The challenges



- **User-centric** approach
- Handle **legal**, **privacy** and **ethical** issues
- Ensure **interoperability** and **scalability**
- **Validate** and **evaluate** (ethical, technical and business)
- **Commercially** exploit the outcomes of the project
- **Cooperate** with projects such as OpenNCP and STORK

## eHDSI and OpenNCP

OpenNCP is a part of the eHealth Digital Service Infrastructure (eHDSI) and allows for the exchange of eHealth Data in Europe

- Patient Summary
- ePrescription

### eHealth DSI Deploying Countries

	PS	eP
Austria	♥	♥
Croatia	♥	♥
Cyprus	♥	♥
Czech Republic	♥	
Estonia	♥	♥
Finland		♥
France	♥	
Germany	♥	
Greece	♥	♥
Hungary	♥	♥
Ireland	♥	♥
Italy	♥	♥
Luxembourg	♥	
Malta	♥	
Portugal	♥	♥
Sweden		♥
Switzerland	♥	♥

## The innovation pillars

**1<sup>st</sup> Pillar:** Enhancement of the trust and security of interoperable eHealth services

**2<sup>nd</sup> Pillar:** Continuous validation and proof of concept demonstrations

**3<sup>rd</sup> Pillar:** Focus on stakeholders, improving user acceptance, adhering to standards and legal and ethical directives

## The technology pillars

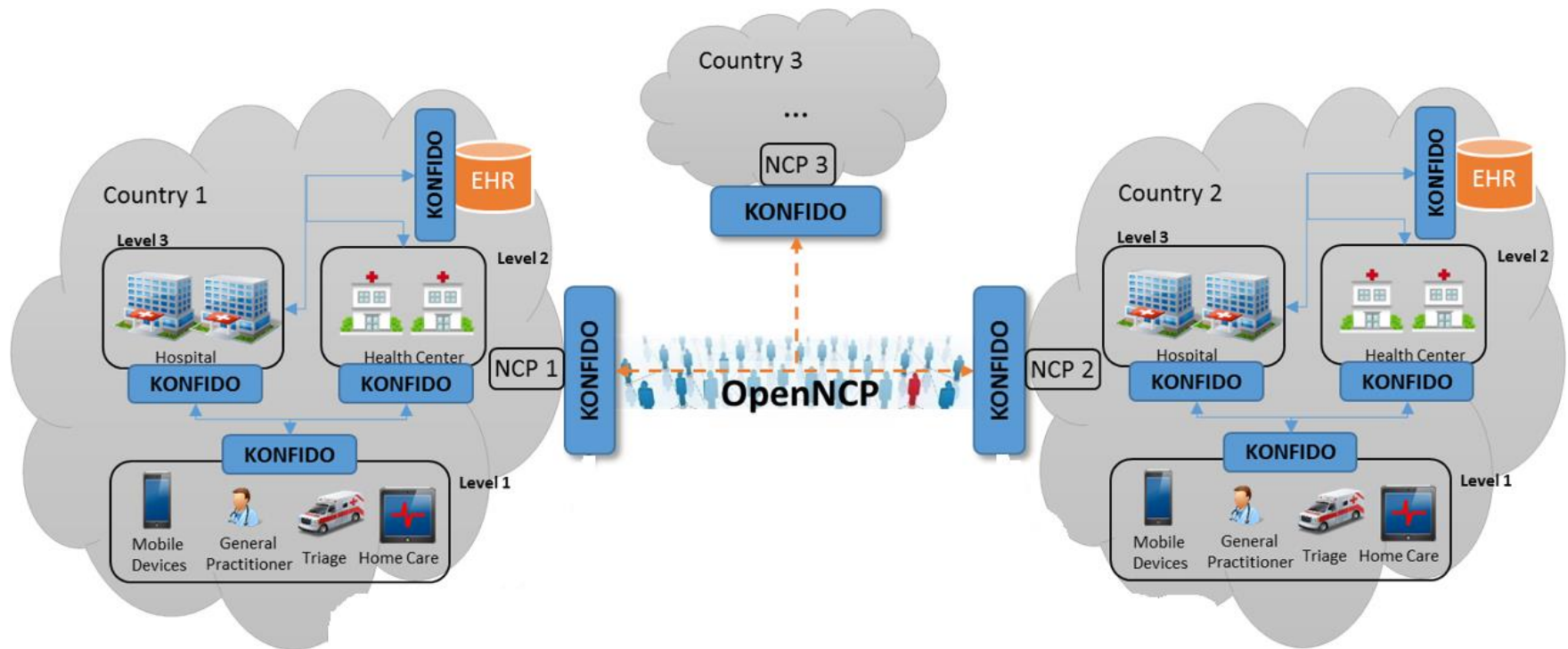
- Design and implement a **STORK-compliant eID infrastructure**
- Implement **disruptive logging and auditing mechanisms**
- Exploit the new **security extensions of COTS CPUs** for creating protected execution environments for eHealth applications

## The technology pillars

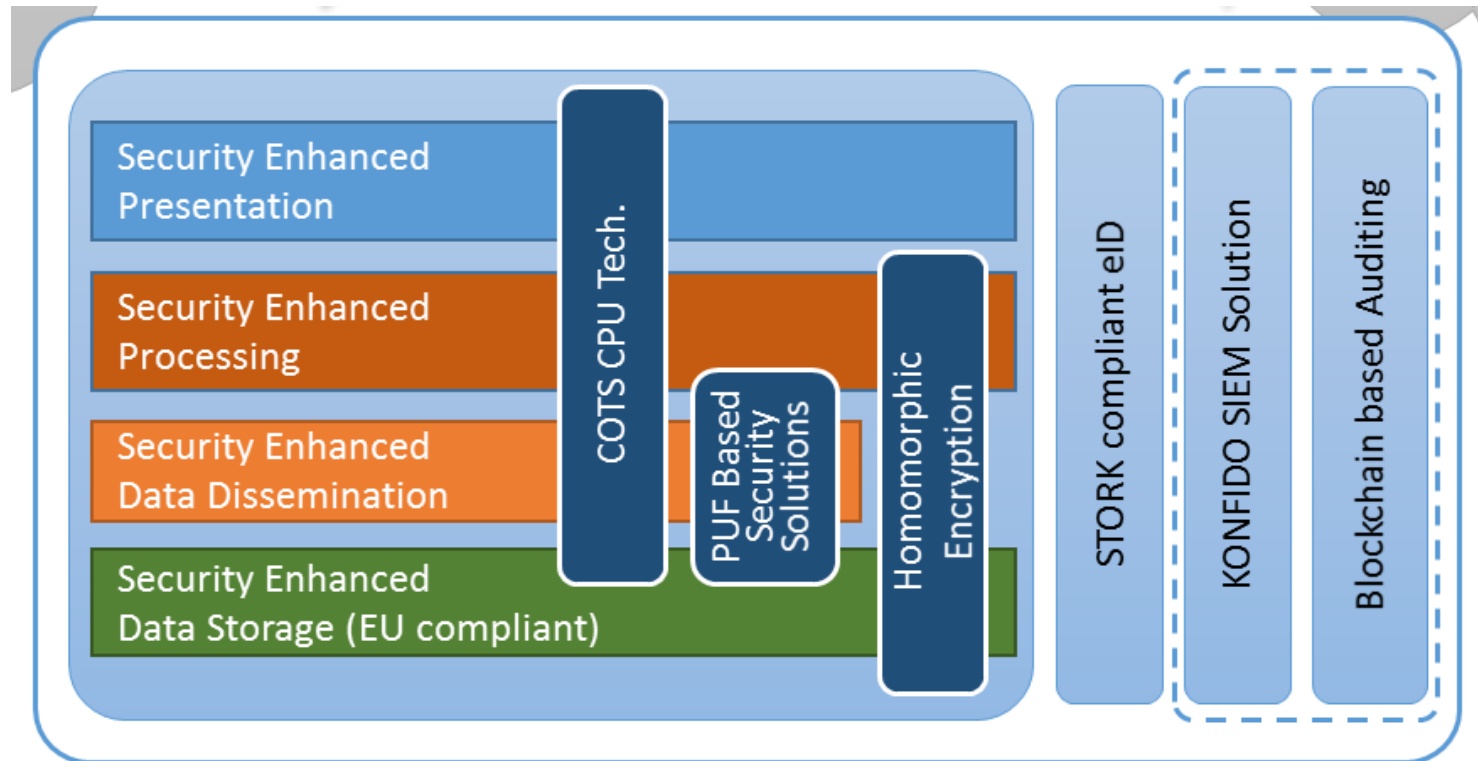
- Develop novel **photonic encryption key generation** technologies
- Build an efficient **homomorphic encryption** mechanism supporting secured health data storage, processing and exchange
- Develop **customized SIEM solutions** for real-time monitoring of the security of eHealth applications



# Conceptual view of KONFIDO architecture

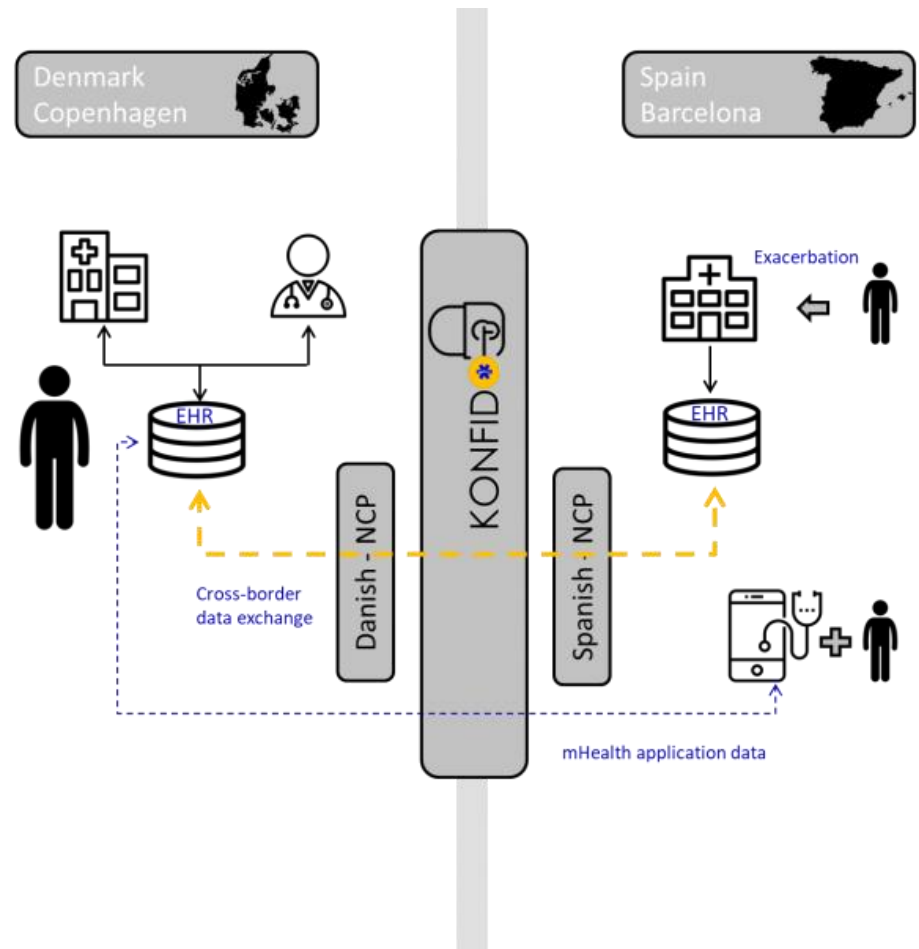


## Conceptual view of KONFIDO architecture



## Validation pilots

- Pilot sites in:
  - Italy
  - Denmark
  - Spain



# KONFIDO Consortium

15 partners

7 countries

2 pilots

**EXUS**.INNOVATION

Imperial College  
London



**IDIBAPS**

Institut  
D'Investigacions  
Biomèdiques  
August Pi i Sunyer

**eurecat**  
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 Agència de Qualitat i  
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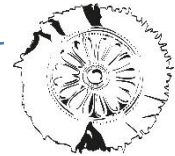
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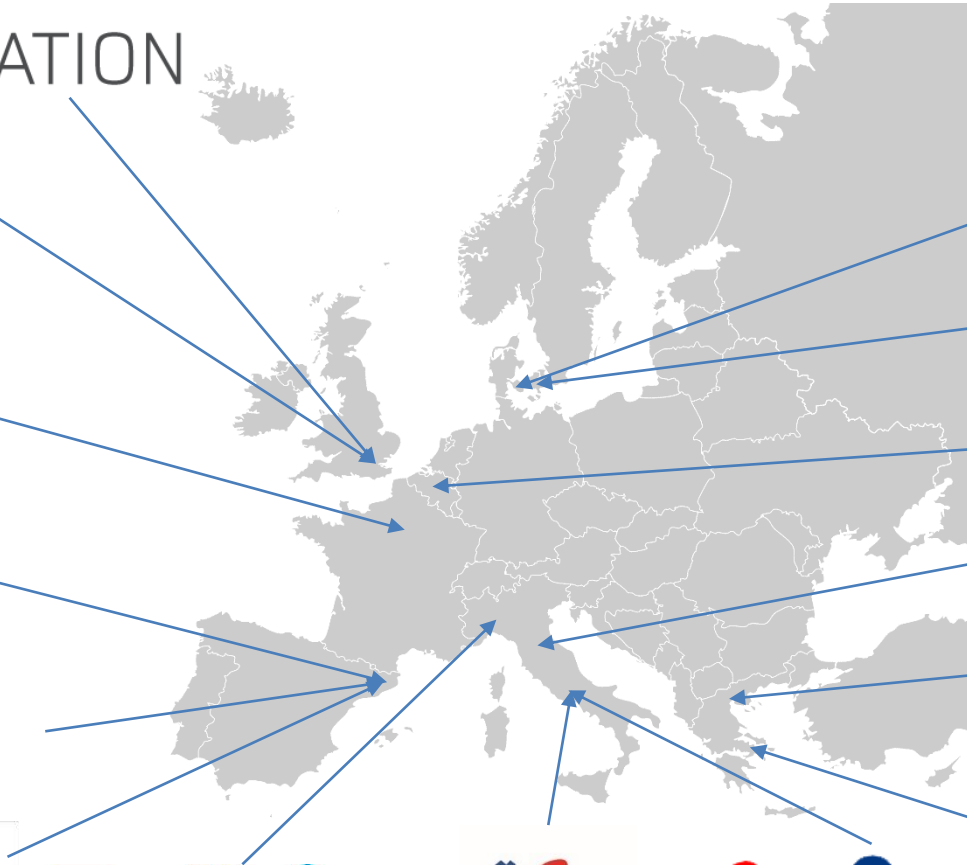
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