

# Objectives

WITDOM aims at producing a framework for end-to-end protection of data in untrusted and fast-evolving ICT-based environments.

WITDOM puts particular focus in scenarios requiring data outsourcing, where new threats, vulnerabilities and risks require end-to-end security solutions that will withstand progress for the lifetime of applications they support.

The WITDOM framework shall use security-and-privacy-by-design methodologies, and advance the state of the art in effective protection of personal and sensitive data in the following areas:

- Privacy enhancing techniques, perturbation mechanisms and privacy metrics
- Privacy-preserving cryptographic techniques supporting encrypted processing
- Cryptographic techniques for integrity and verifiability of outsourced processes
- European legal landscape.

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Project  
Total budget: 4,020,281.25 €  
Total EU funding: 2,764,031.25 €  
Starting date: January 1st 2015  
Duration: 36 months



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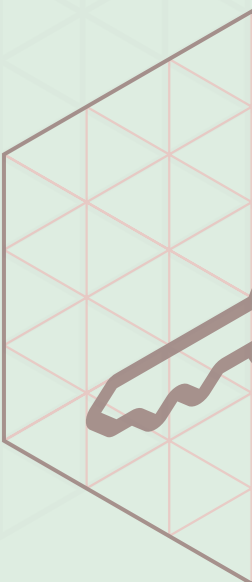


The work described here has been conducted within the project WITDOM, started in January 2015. This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 64437. This work was supported in part by the Swiss State Secretariat for Education, Research and Innovation (SERI) under contract number 15.0098. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Swiss Government or of the European Commission.

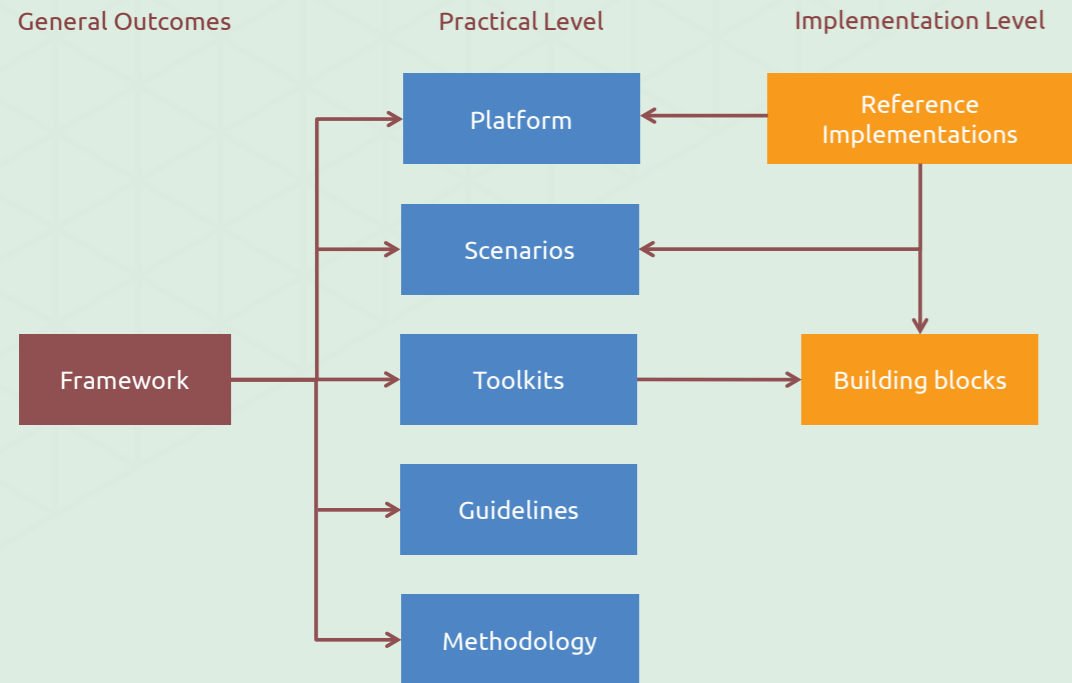


Empowering privacy and security  
in non-trusted environments

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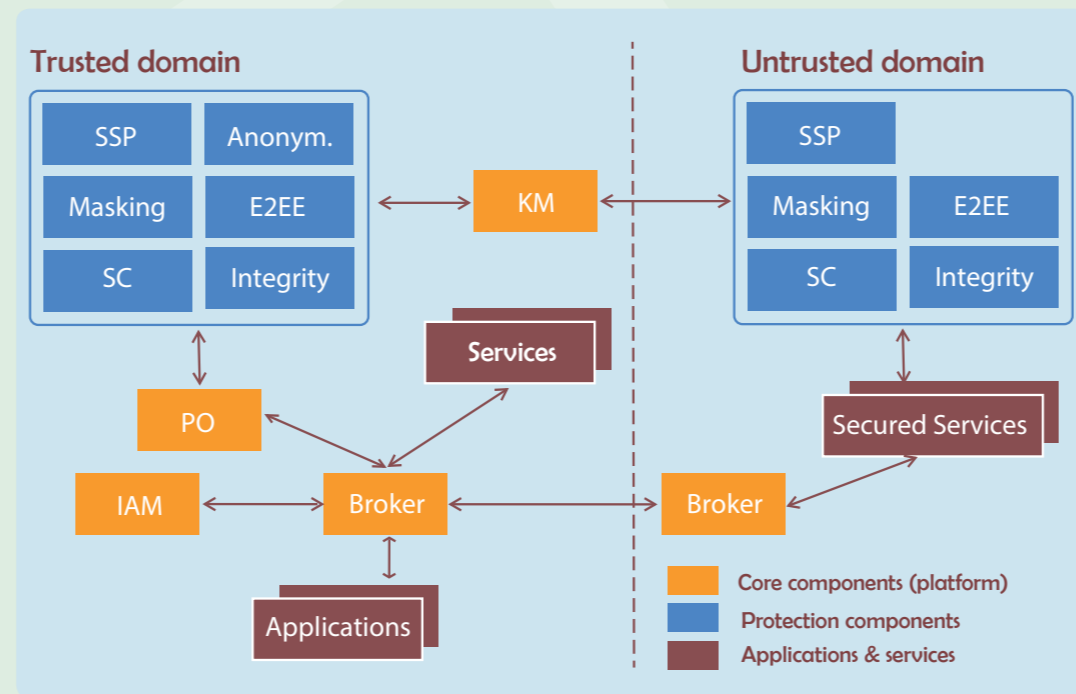
# Main Outcomes



# Initial Architecture

The architecture has the following characteristics:

- Service-oriented architecture
- Applicable to multiple scenarios
- Modular, extensible and flexible
- Complex service composition by successive calls to individual services
- Services can be securely deployed in the trusted and untrusted domain



# Scenarios

The WITDOM framework will be instantiated and validated in two privacy-sensitive application scenarios:

- e-Health** (DNA icon): Genetic/proteomic data protection, shared for large-scale research analyses and outsourced clinical analysis.
- Financial Services** (Euro icon): Protection of large-scale outsourced financial data storage and processing (e.g., financial risk calculation or fraud detection).

