Federated Technical Architecture -

Jaak Tepandi Tallinn University of Technology SCOOP4C Tallinn, 31.05.2017

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The

Once

Only Principle



(OOP) Architecture



- Fundamental concepts or properties of a system in its environment embodied in its elements, relationships, and in the principles of its design and evolution
- An architecture could be expressed through several distinct architecture descriptions (for example when different architecture frameworks are employed). The same architecture could characterise more than one system (for example a family of systems sharing a common architecture)
- Architecting is performed throughout the system life cycle and depends on the selected life cycle













Requirements



- Requirements come from different sources: external political and legislative environment, technical best practices, the TOOP project as formulated in its TA, and the TOOP pilots
- Requirements relate to different artefacts: to the OOP architecture, to the OOP applications in general, to specific applications
- According to requirements of the TOOP Technical Annex, the first deliverable has to include, among others, the requirements, the initial building blocks, and the interface specifications of the generic federated architecture





Selection of Building Blocks for OOP Architecture

• Need for the BB follows from the TOOP pilot requirements.



- To be useful for TOOP pilots, a building block should comprise specifications and software that can be used for specifying and building applications. Therefore, availability of such specifications and software is an important criterion for selecting building blocks needed for OOP applications.
- To be useful in long-term applications, a building block must be maintained and supported. Availability of maintaining and supporting organisation is another criterion for including a building block in the list below.

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List of BBs



CEF DSIs

- eDelivery
- elD
- eSignature •
- elnvoicing •
- eTranslation •
- E-HI (Human Interface)

E-SENS SATs

- eDelivery
- elD
- eSignature
- elnvoicing •
- eTranslation
- E-HI (Human Interface) •
- Non-repudiation and traceability •
- Trust establishment
- eDocument
- **Semantics** •

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Architecture takeaway

• Principles, requirements



- Methodology for architecture development and usage
- Initial inventory of BBs: short overview, availability of maintaining and supporting organization, availability of specifications and software for applications
- High-level views of the architecture
- Principles of selection of building blocks for OOP applications
- Building blocks relevant to TOOP pilots and projects: analysis with respect to their relevance, applicability, sustainability, need for further development, and external interfaces

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Thank you!

jaak.tepandi@ttu.ee

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