SEVENTH FRAMEWORK PROGRAMME

SHAPE

European Commission Information Society and Media

Semantically-enabled Heterogeneous Service Architecture and Platforms Engineering

Specify, develop and test a **tool-supported methodology** for **flexible business models** and **parameterised services** on **SHA** through **MDE** approaches and **standardisation** of these results.

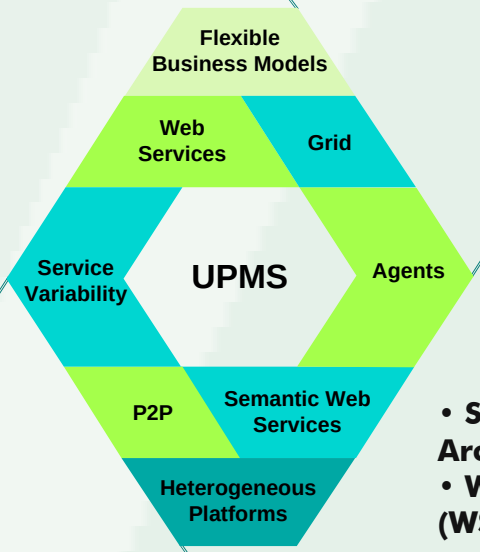
SHA = Semantically-enabled Heterogeneous service Architecture

- Extends SOA with semantics and support for heterogeneous architectural styles

MDE (Model Driven Engineering) Toolset

- Editors based on metamodels
- Transformations from business models through UPMS to the various technologies

- Minimising the gap between business and system modelling
- Changes in the business model reflected by the underlying system
- MDE of business aspects (processes, services, etc.)
- Defining metamodels for Agents, P2P, ERP services and grid technologies
- Transformations from UPMS and UMPSHA to the realization technologies
- Refine existing techniques for variability and extensibility
- Semantically-enabled Service Architectures (SESA)
- Web Service Modeling Ontology (WSMO)
- Lifting the system specification models to a platform independent level
- Reference models for SOA and SHA



UPMS = UML Profile and Metamodel for Services

- Open source implementation
- Standardization via OMG

Two Industrial Pilots

Dynamic, adaptable and robust systems for oil and gas operations. Explores methods to improve operational efficiency and to address the government issued requirements for environmental safety.

Manufacturing planning and control system. Investigates the development of a supply chain management from pig iron supply to customers.

Industrial Partners

SAP, SOFTEAM

Academic/Research Partners

SINTEF, ESI tecnalia, STI Innsbruck, DFKI

Use Case Partners

saarstahl, StatoilHydro

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