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**Invited Talk for BCI 2009**  
**Modelling Semantics in Service-Oriented Environment**

**Abstract**

When approaching the ideas of Modelling Semantics Requirements and Service-Oriented Environment from the business informatics' viewpoint, it becomes essential not only to address the challenges of the business level but also to consider their alignment with a technical realisation.

Our **MOSE** Approach Modelling Semantics in Service-Oriented Environment supports the following:

- the design of a coherent view, providing methods to align modelling concepts from different application domains.  
On business level there is the challenge to derive a coherent view influenced by business-, legal- and technology regulations. The proposed methodology consists of (1) the engineering of your business and the related services; (2) the corresponding service-oriented environment which has to be adequately used and (3) the corporation resources and assets that have to be evaluated.
- the enablement of formalisms for the interpretation in the given Service-Oriented Environment.  
Hence different formalisms are integrated via the meta-modelling approach in order to enable a technology-based representation. The meta-modelling approach is here proposed as a concept to integrate the modelling languages in use, to achieve different perspectives of the coherent view.
- the transformation between different modelling languages in order to execute the models.  
The Service-Oriented Environment is at this point introduced as a technology-paradigm that virtualises computer resources into executable services. Hence the concrete Service-Oriented Environment depends on the underlined technology and management.

The aforementioned applications of Semantic Modelling have been applied in a set of EU-funded projects, which will be presented.