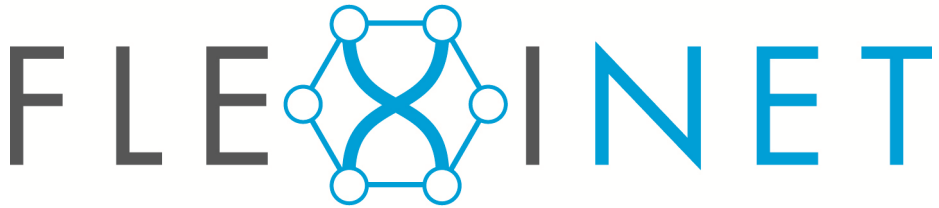
Intelligent Systems Configuration Services for Flexible Dynamic Global Production Networks



FLEXINET and Standardisation

Product-Service-Production Reference Ontologies

The FLEXINET project no. 688627 is funded under the Seventh Framework Programme FP7-2013-NMP-ICT-FOF (RTD) Duration: 1st July 2013 – 30th June 2016

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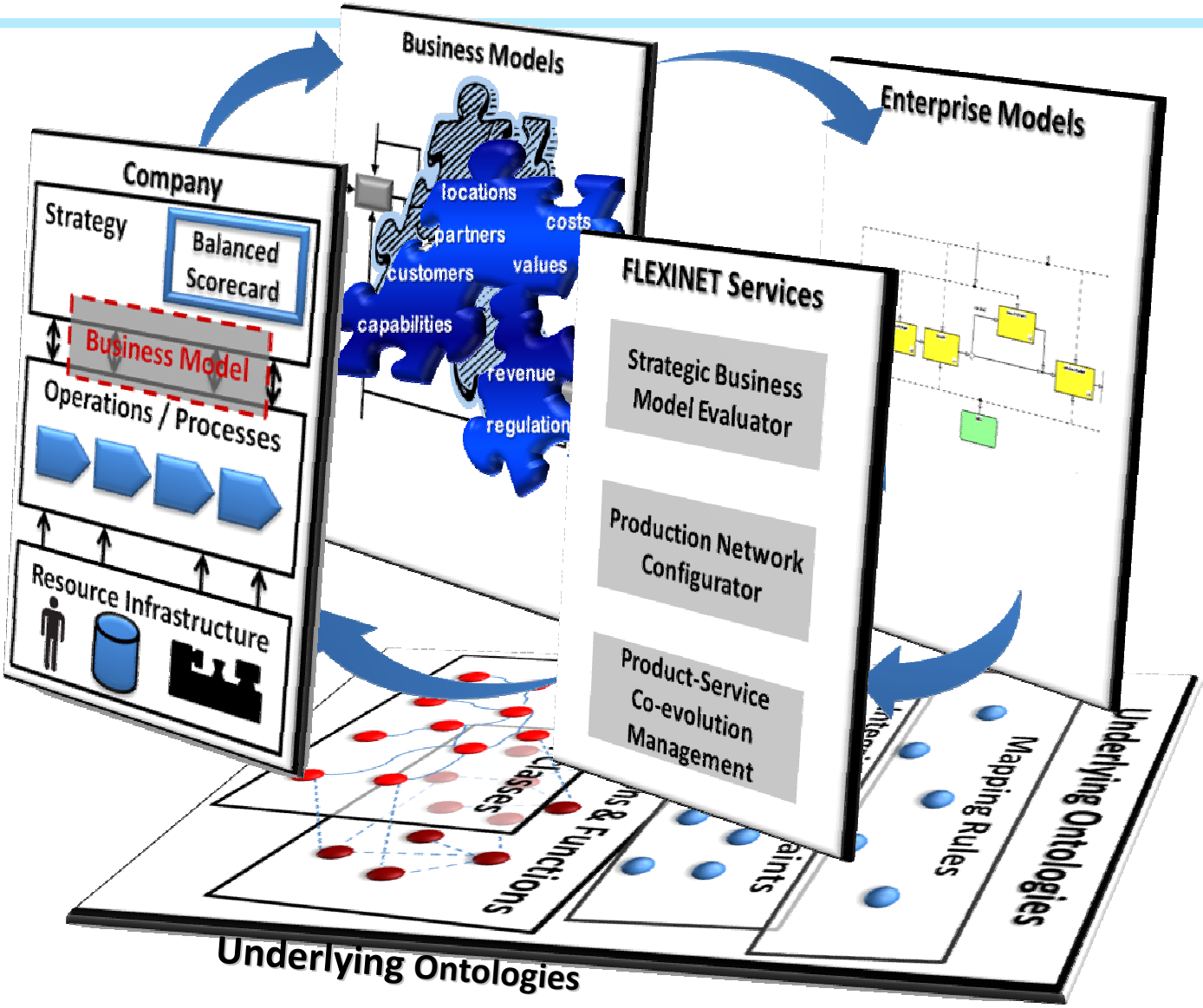
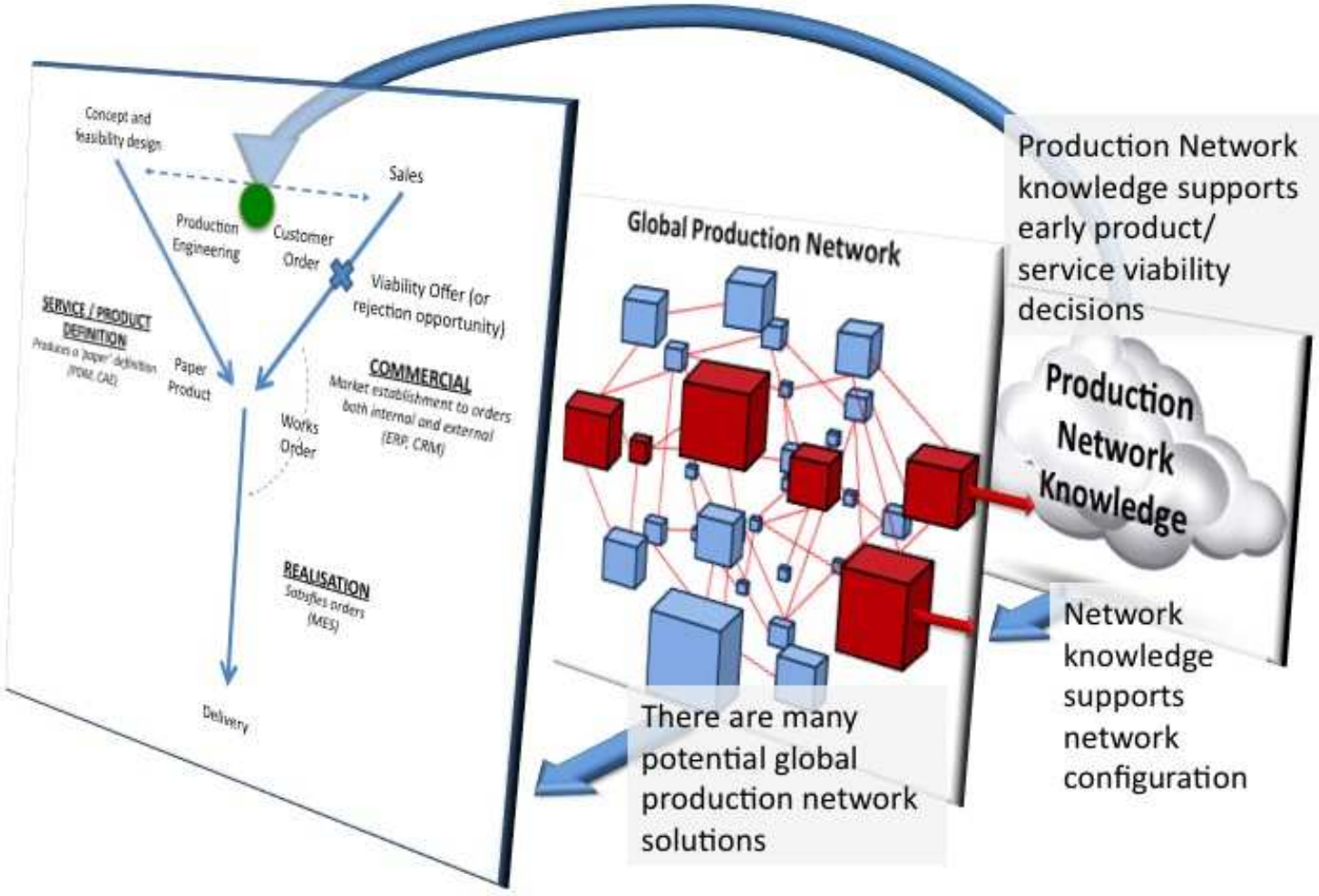
FLEXINET Services supporting the Enterprise



FLEXINET – Configuring global (product-service) production networks



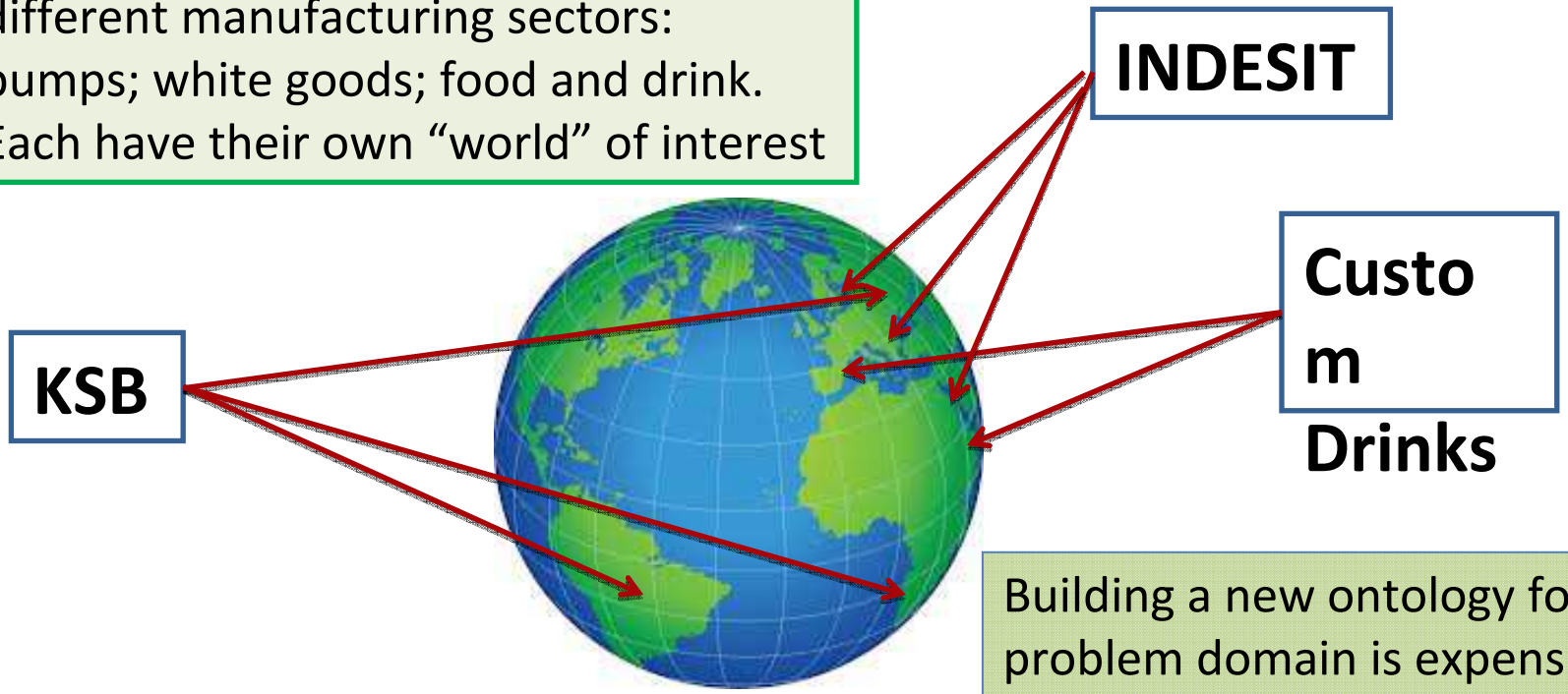
Why bother with formal ontologies?

Capture Knowledge about your "world" of interest

- knowledge harmonisation
- clearly defined vocabularies
- computer interpretable -> consistency checks
- use KB to answer questions

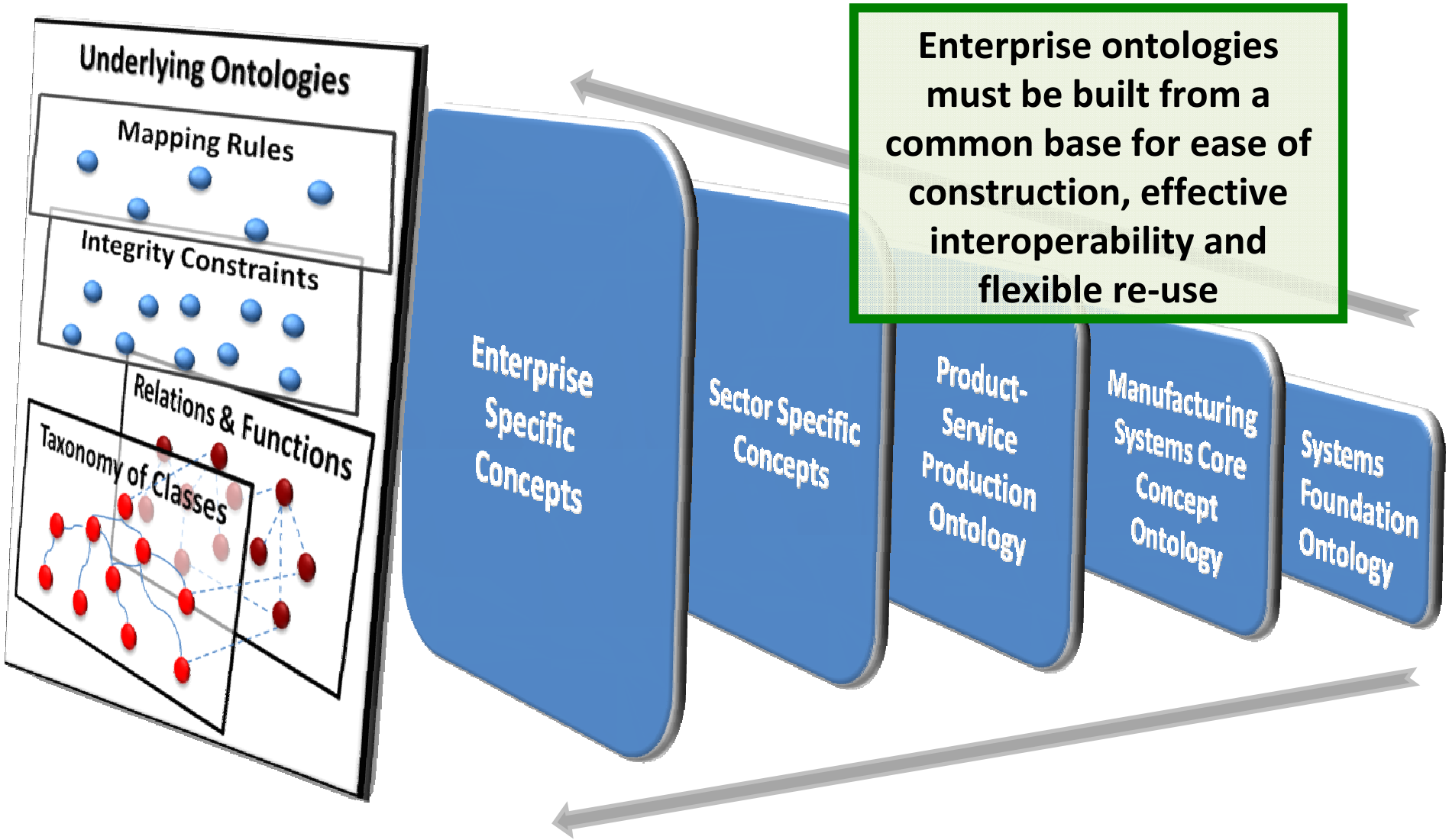
FLEXINET: The industrial perspective

FLEXINET is working with three different manufacturing sectors: pumps; white goods; food and drink. Each have their own “world” of interest

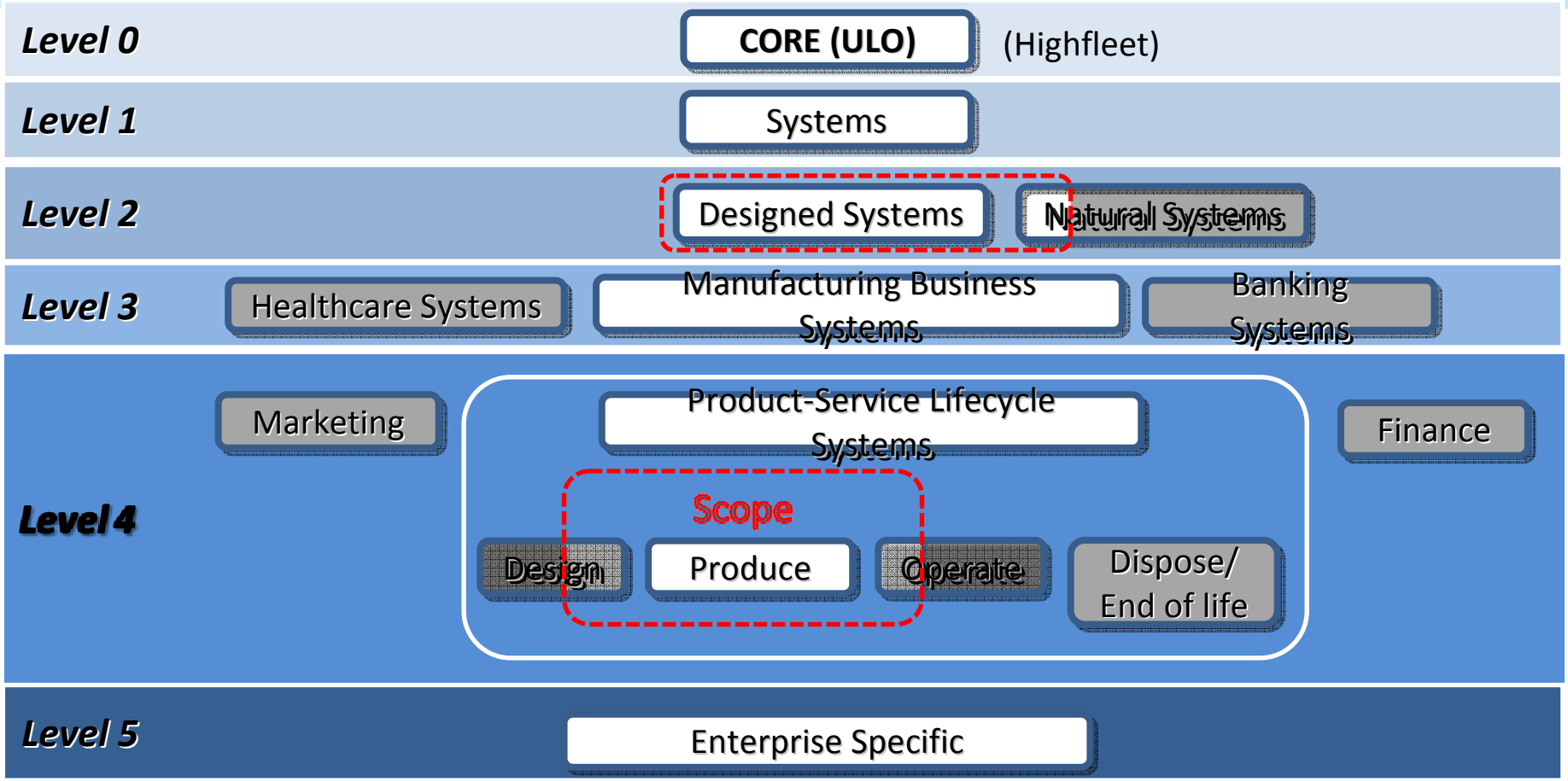


Building a new ontology for every problem domain is expensive and negates any real potential for consistency and therefore any real capability for knowledge harmonisation

The FLEXINET approach - Reference Ontologies



Ontology Layers in FLEXINET



FLEXINET is concerned with modeling the elements of global production network systems

FLEXINET will use these models to support 'what-if" queries on the configuration of these elements into global production systems

Next steps towards standardisation

1. Develop the content for the various layers
2. Formalise and test the ontologies
3. Present the project to ISO TC184/SC4 (Nov 2014)
4. Discuss the preparation of a New Work Item with ISO TC184/SC4/JWG8 members (Nov 2014) - default timescale thereafter is 3 years to standardisation