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Modelling a business management system

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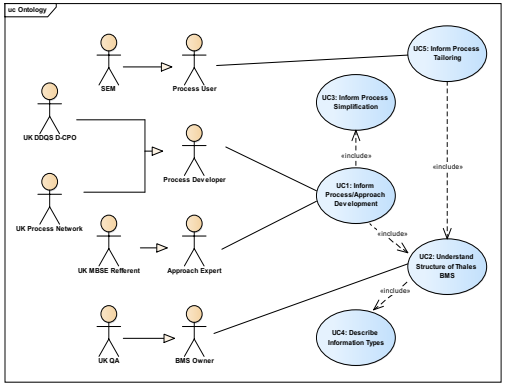

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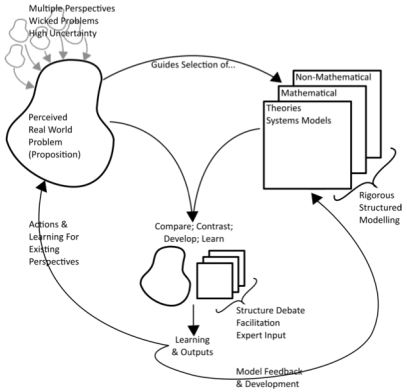

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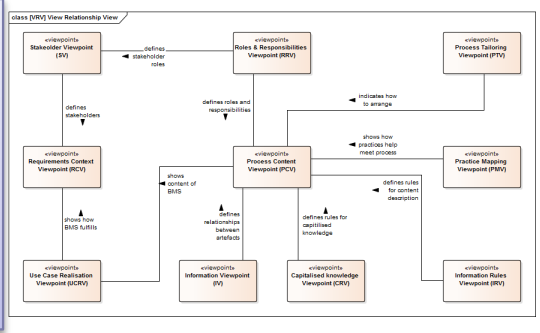

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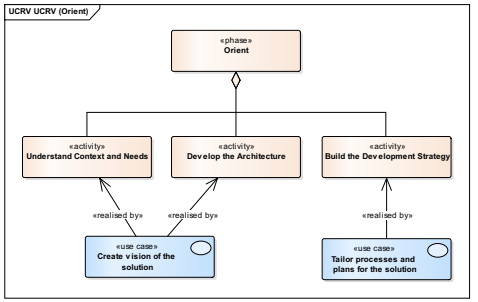


Why model a business process?

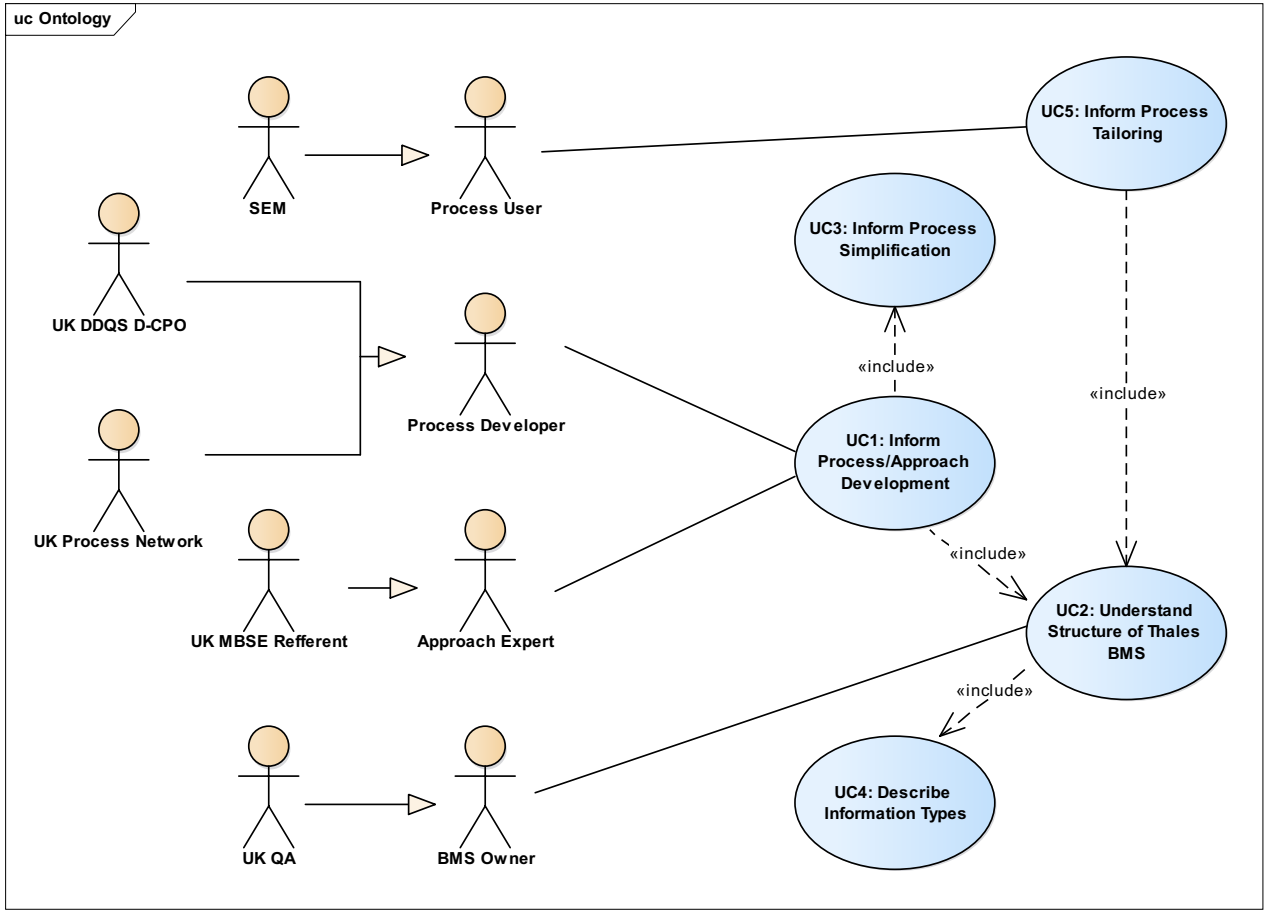
Context: MBSE implementation proposed across the business

Prerequisite to this is an agreed understanding of BMS

- in particular the engineering process, known as DDQS

Scope broadened to address general process understanding

- for process tailoring
- for future simplification



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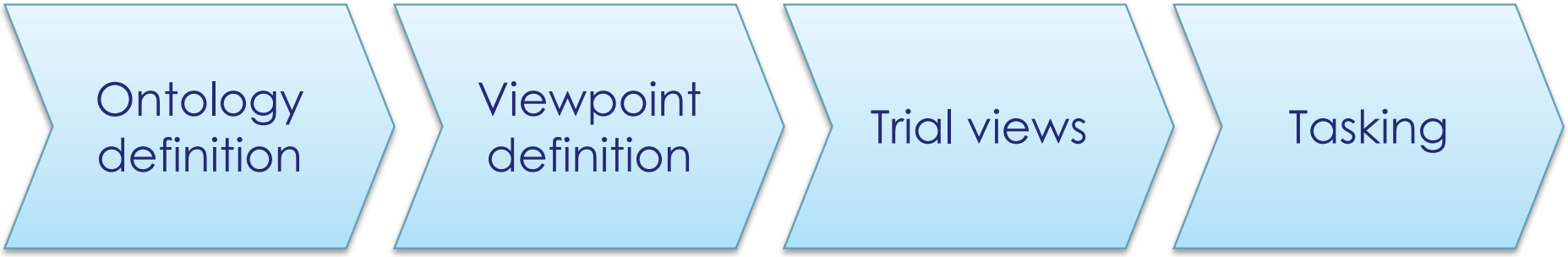
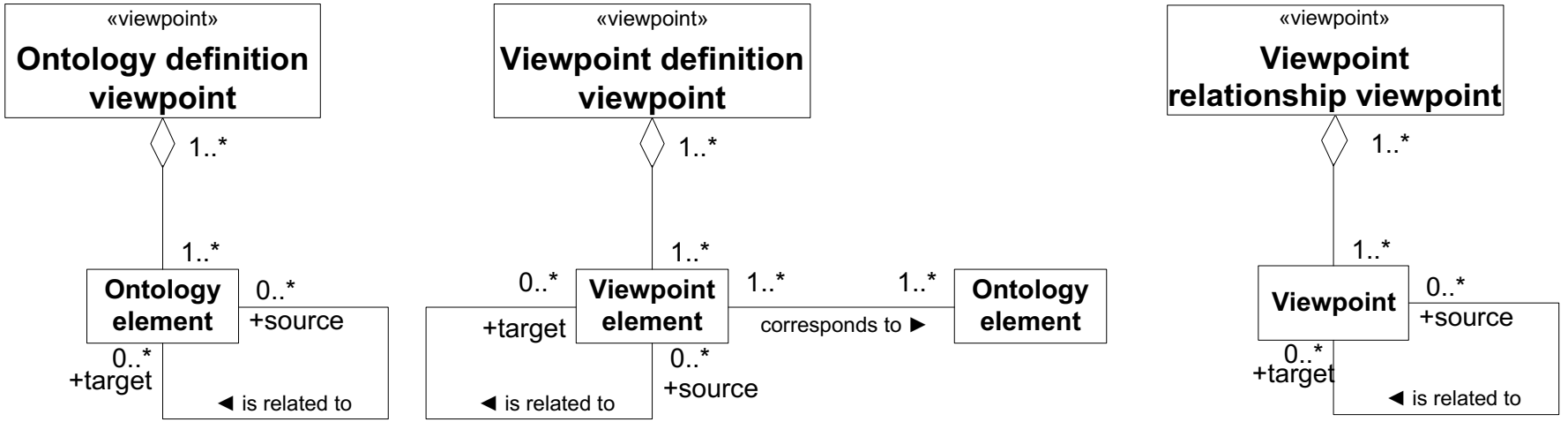
Requirements on the model

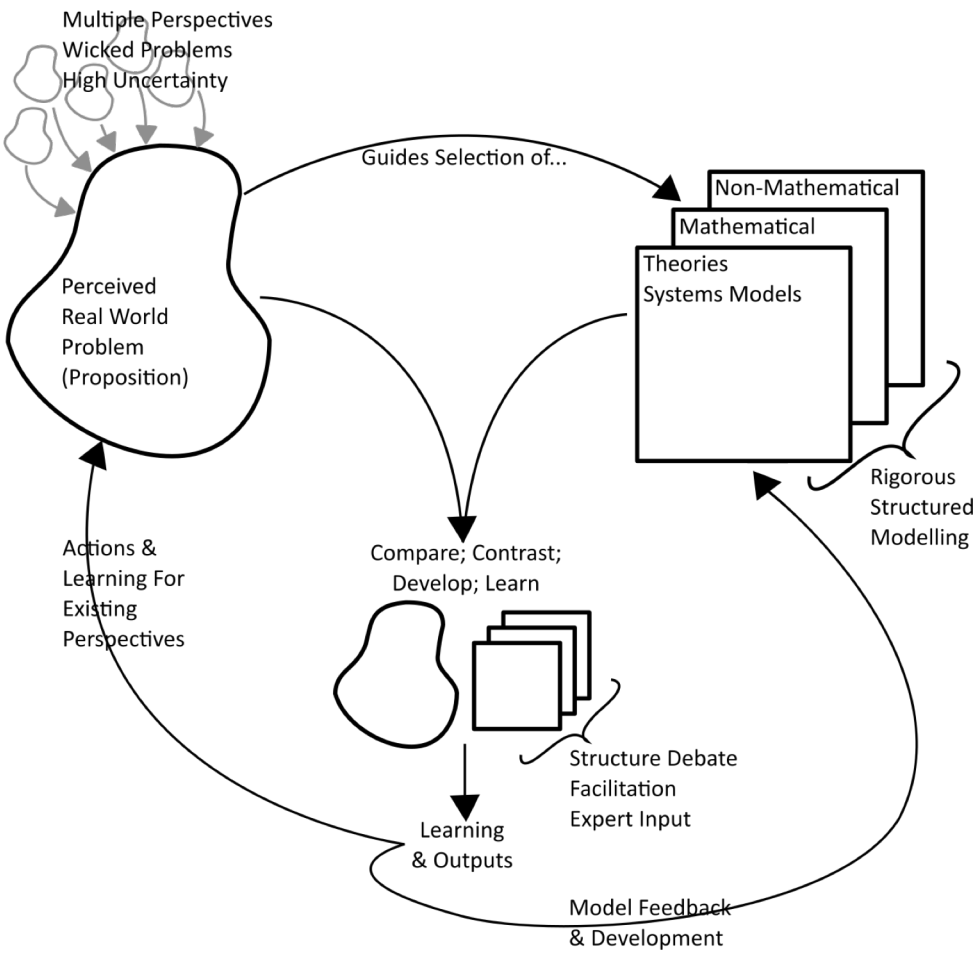
UC1	Inform process/approach development	BMS model describes the extent of business process and rules in any area; Development of approaches or ways of working can then build on this clear foundation; Risk reduced of overlap between core rules and methodology choices
UC2	Understand structure of Thales BMS	Provide consistent definitions and descriptions of process hierarchy, artefact types, roles etc.
UC3	Inform process simplification	Need identified to consolidate reference system (consisting of many documents) • eliminating duplication • ensuring correct categorisation of artefacts
UC4	Describe information types	Clarify definitions of artefact types; eliminate duplication, overlap and conflict; clarify what is mandatory and what is tailorable.
UC5	Inform process tailoring	Help process users understand and visualise the core process so they can adapt it to the requirements of their current work

Planning the model



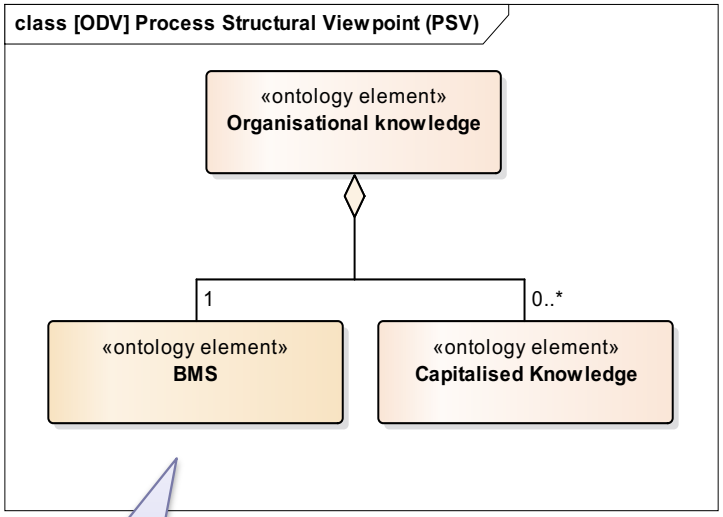


Iterations in model capture



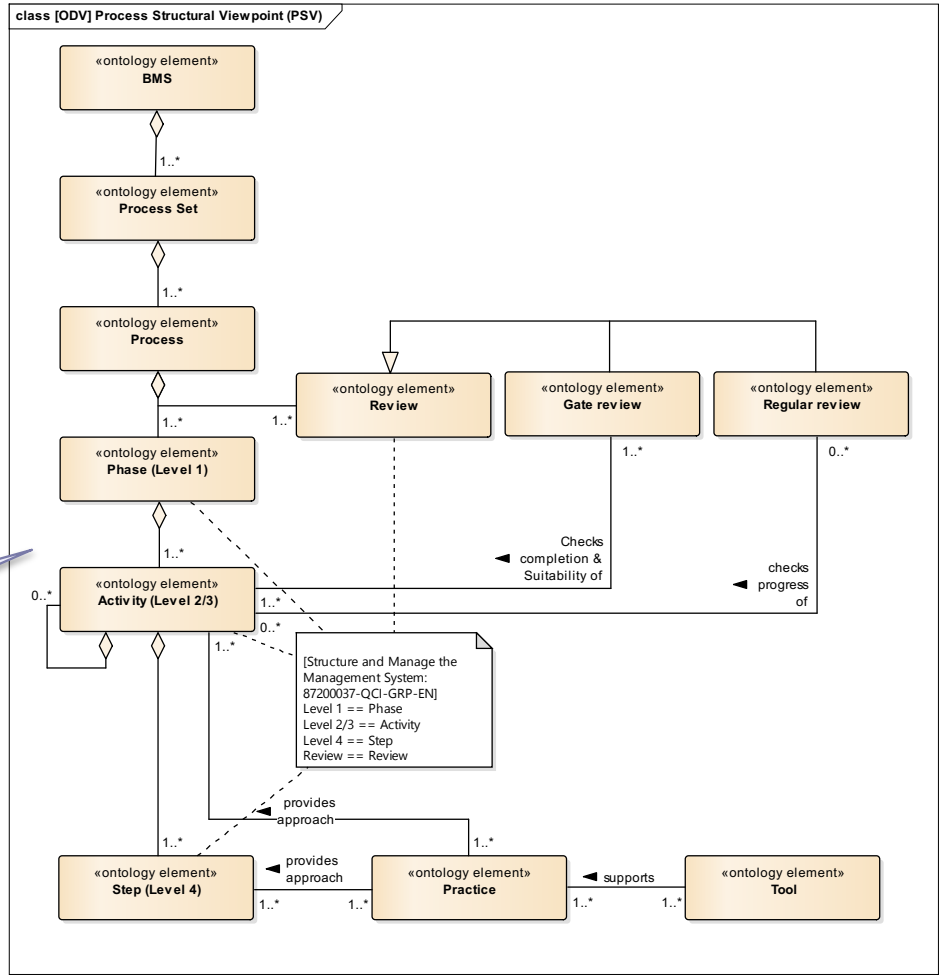
Iteration	Existing Models/ Information	Development
I	BMS portal ISO 15288 (concepts) SysML for Systems Engineering:	Initial Model (DDQS) Initial Views
II	External Review	Initial Model (DDQS) Initial Views
III	BMS portal BMS instruction on management and structuring of the BMS BMS instruction on management of BMS documents	Initial Model (C2)
IV	Engineering environment 'Approaches' Workshop	'Approaches' BMS as dynamic & static
V	Internal Review	Information type removal RACI
VI	Model Review	Model (C2) Views DDQS (Sol) Model

UC2 detail – building the ontology



Capture of organisational knowledge

Capture of process hierarchy



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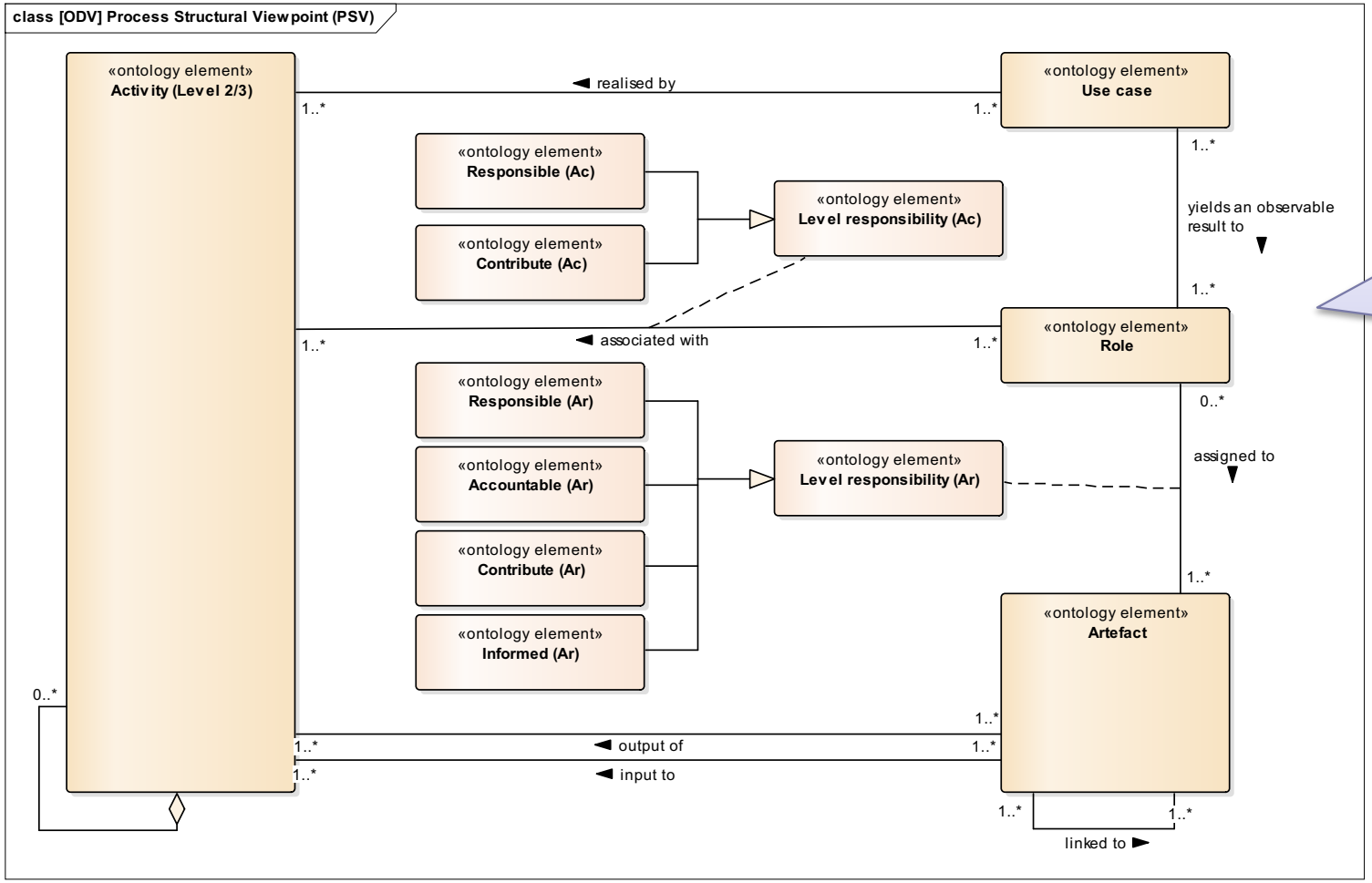
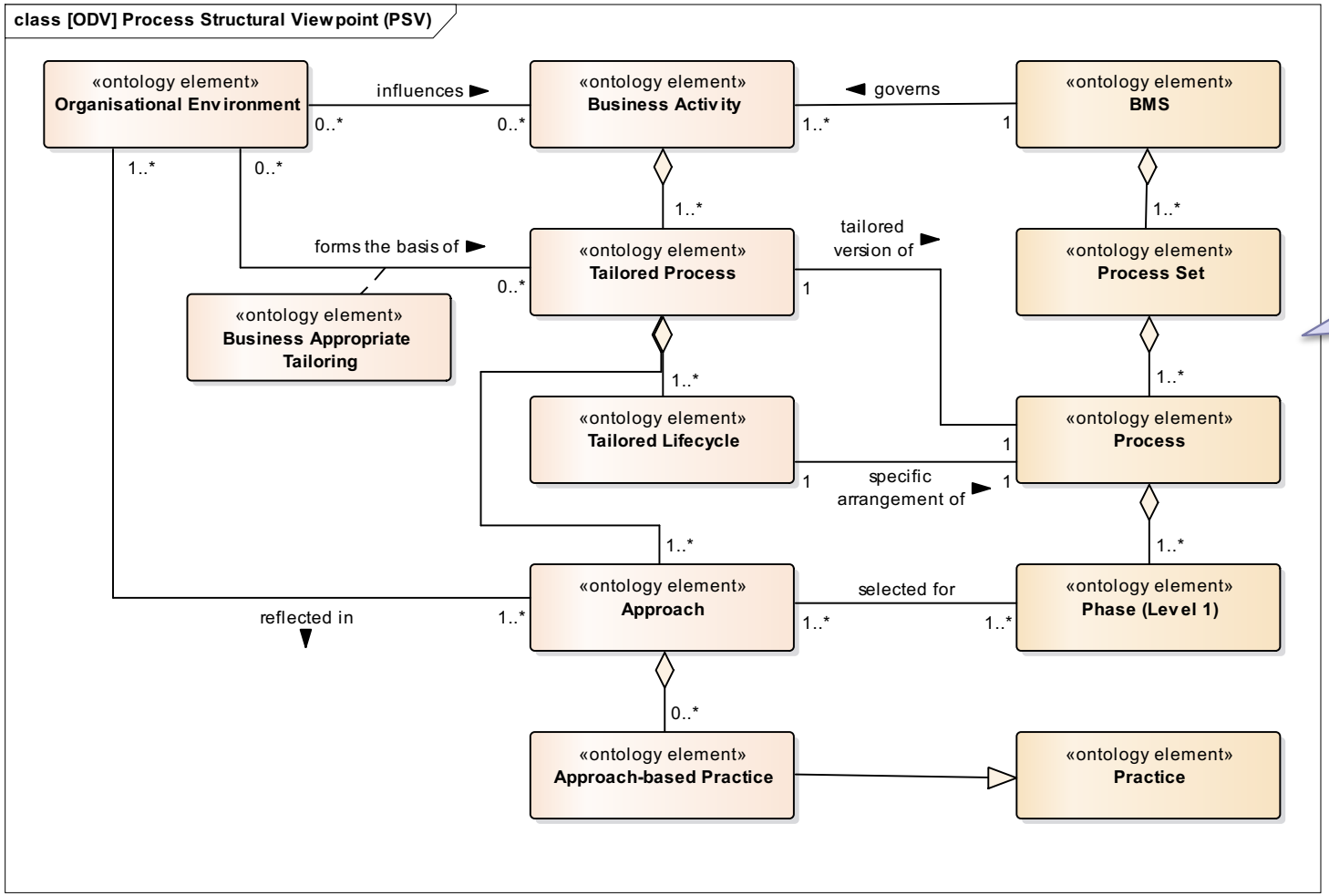


Capture of roles and responsibility types

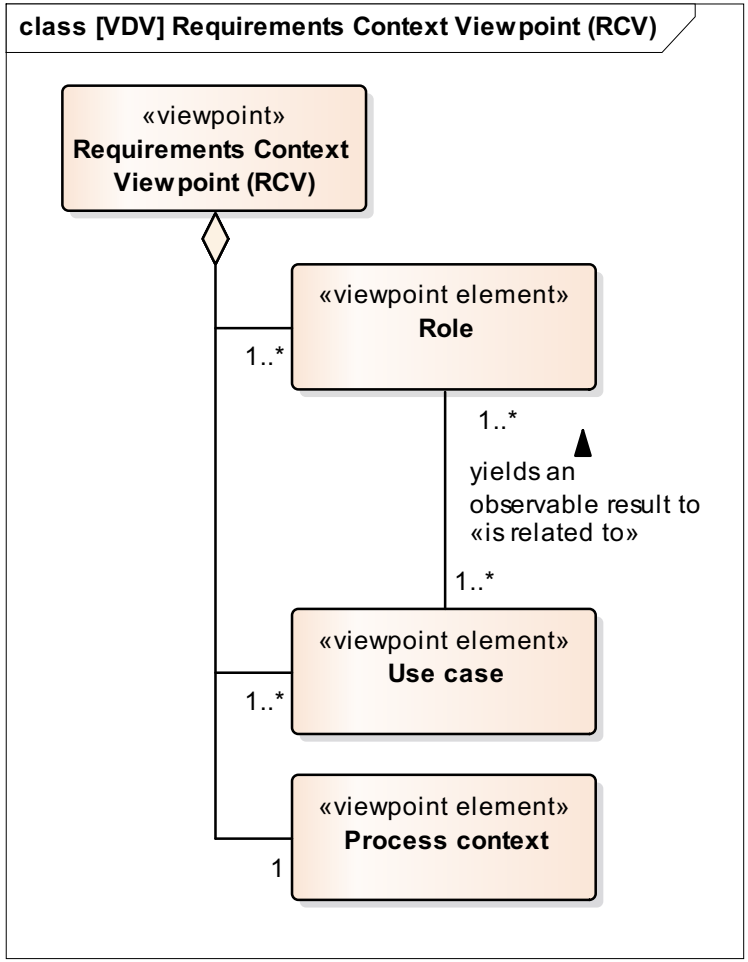
UC2 detail – building the ontology



Approach development & tailoring

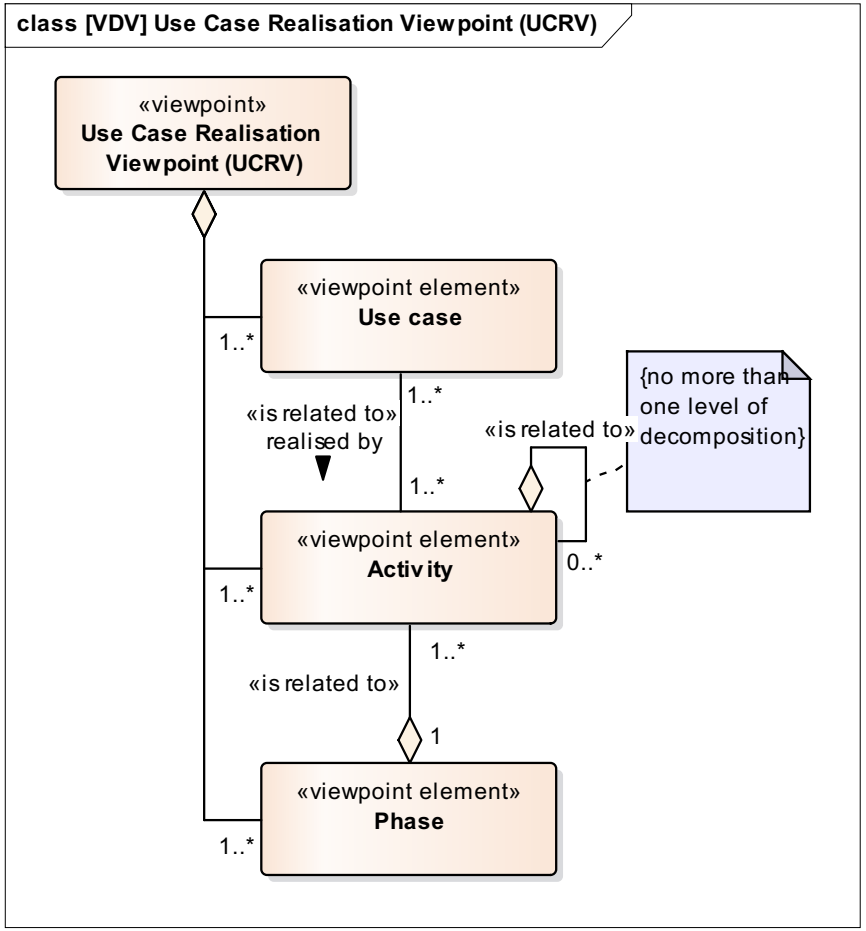
Standard 7 Views viewpoints

- Some of the 7 Views viewpoints were used directly
  - Stakeholder viewpoint
  - Requirements context viewpoint
  - Process structure viewpoint
  - Process content viewpoint
  - Information viewpoint
- Not used:
  - Process instance viewpoint
  - Process behaviour viewpoint
- All expressed using FAF Viewpoint Definition Viewpoint

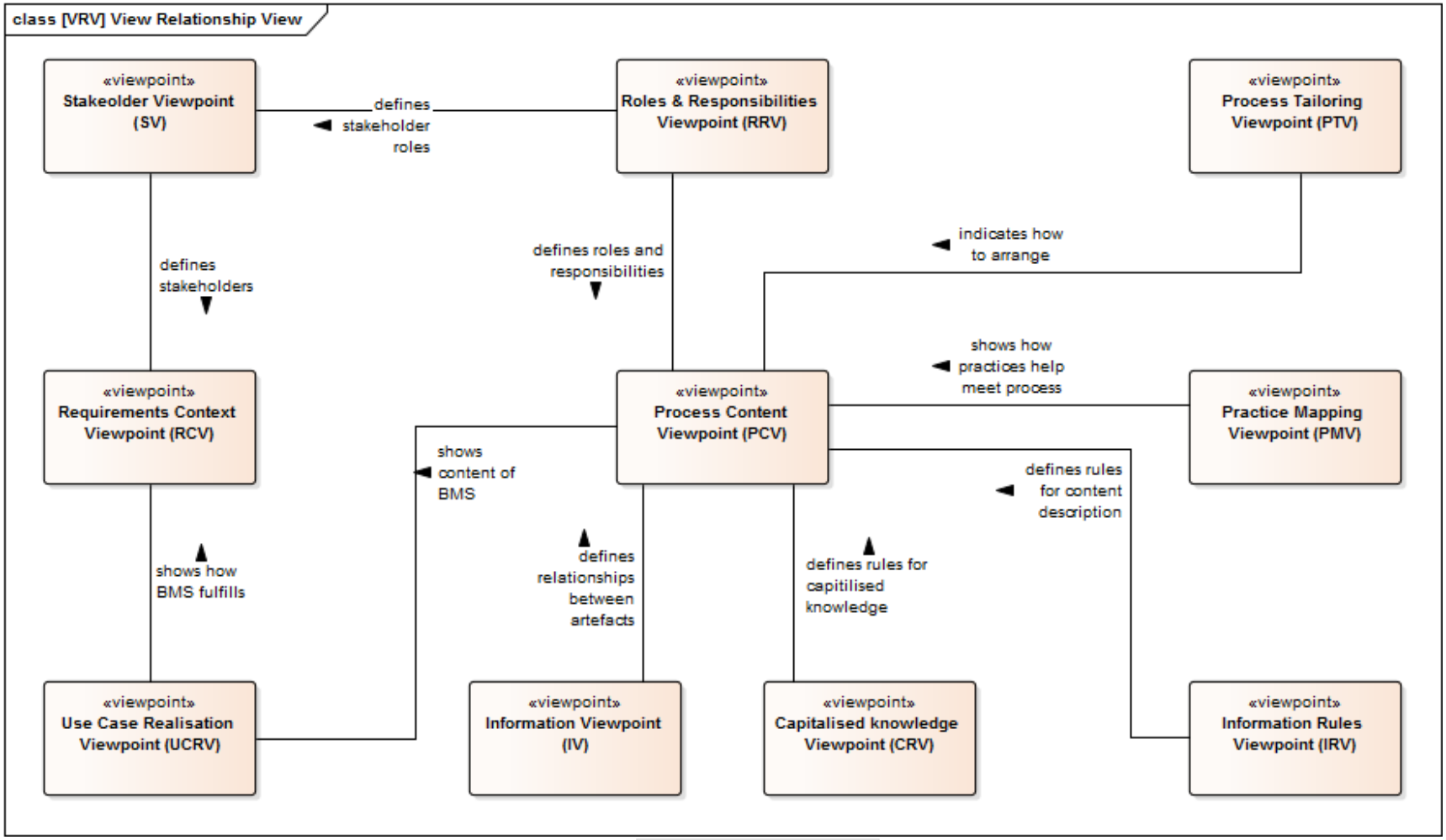


Complementary viewpoints

- **Use Case Realisation Viewpoint** – for mapping how activities in the process fulfil or realise a use case belonging to a process stakeholder
- **Process Tailoring Viewpoint** – for identifying tailoring and arrangements of standard elements of process, as might happen on specific projects
- **Roles & Responsibilities Viewpoint** – for mapping roles to process steps via a level of responsibility (e.g. RACI)
- **Information Rules Viewpoint** – for standardising the categories of information handled by the process and their relationships to each other



Resulting viewpoint relationships



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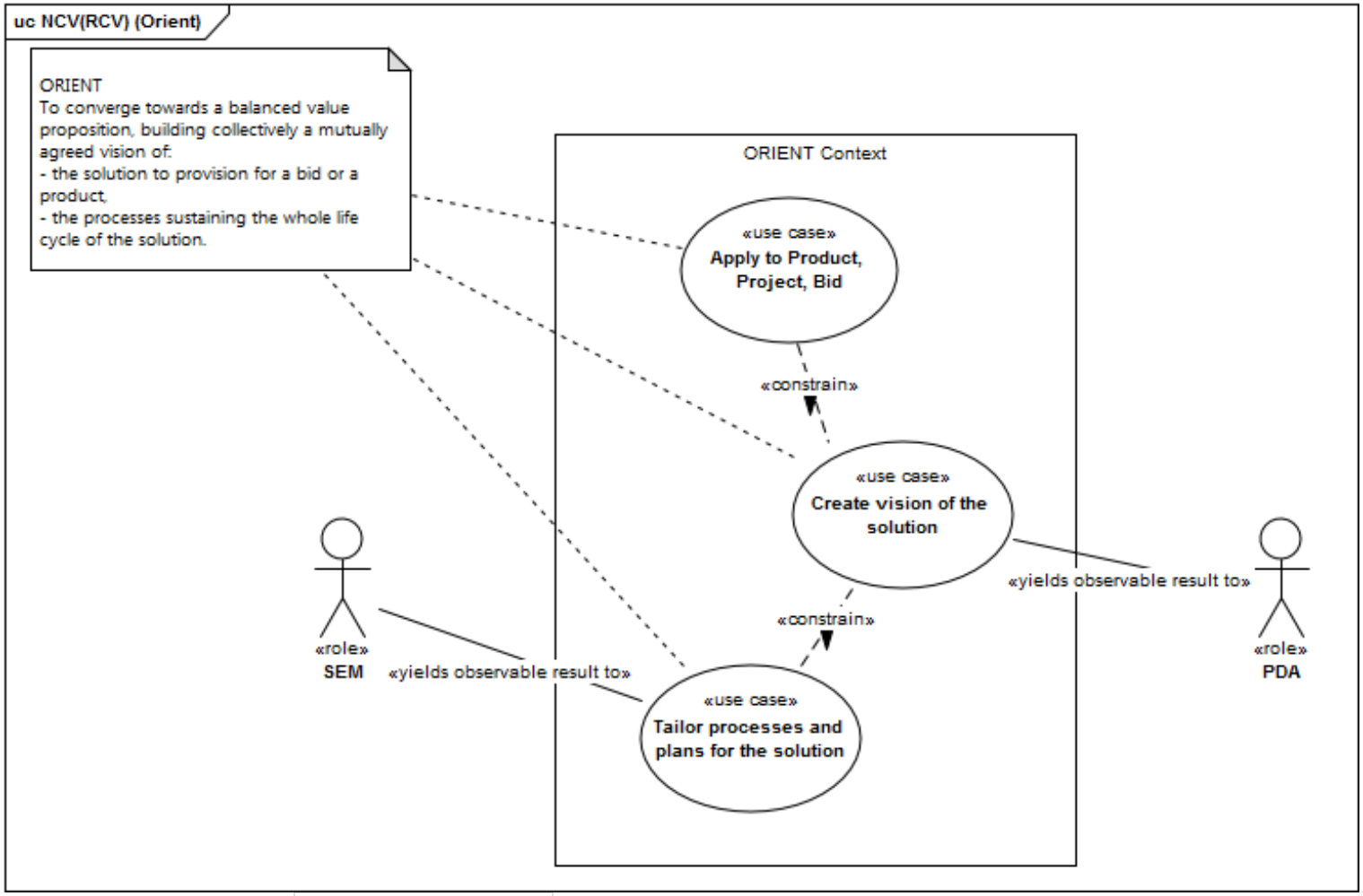
Resulting model



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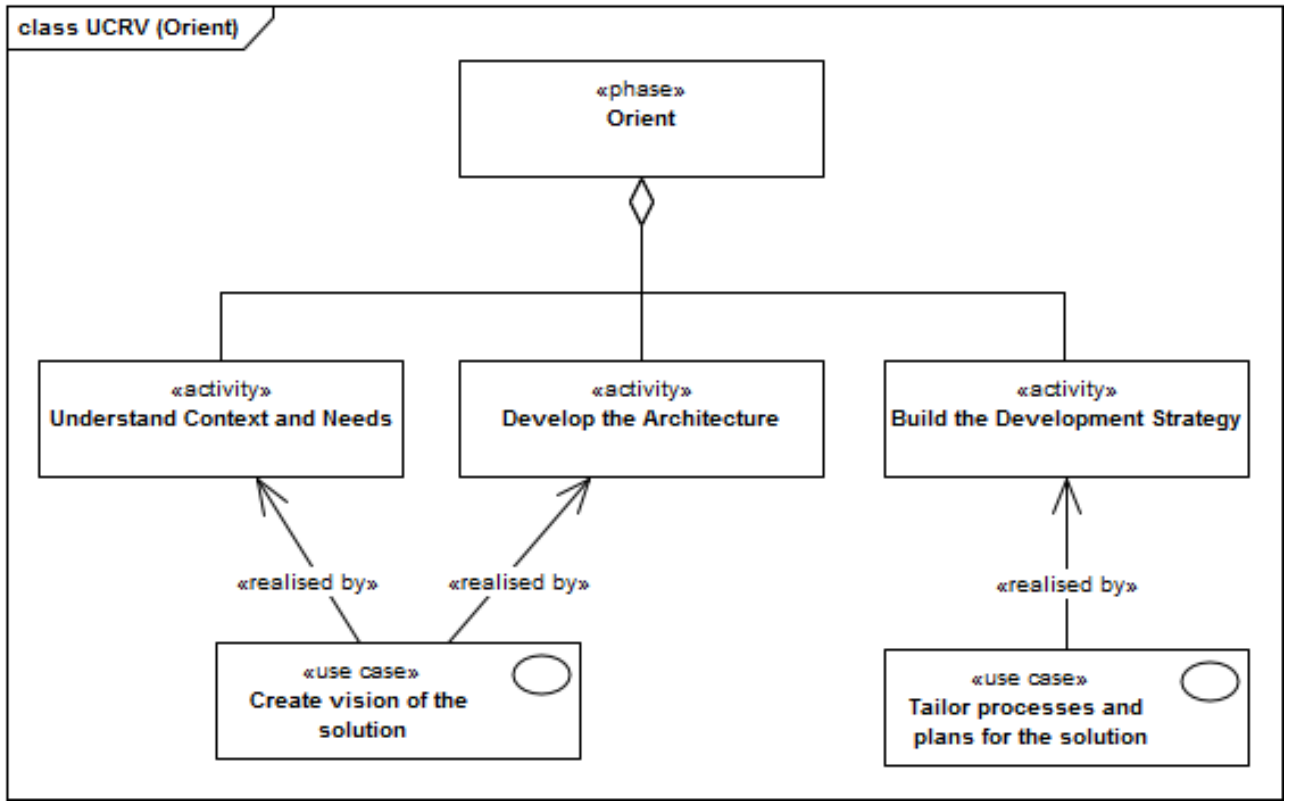

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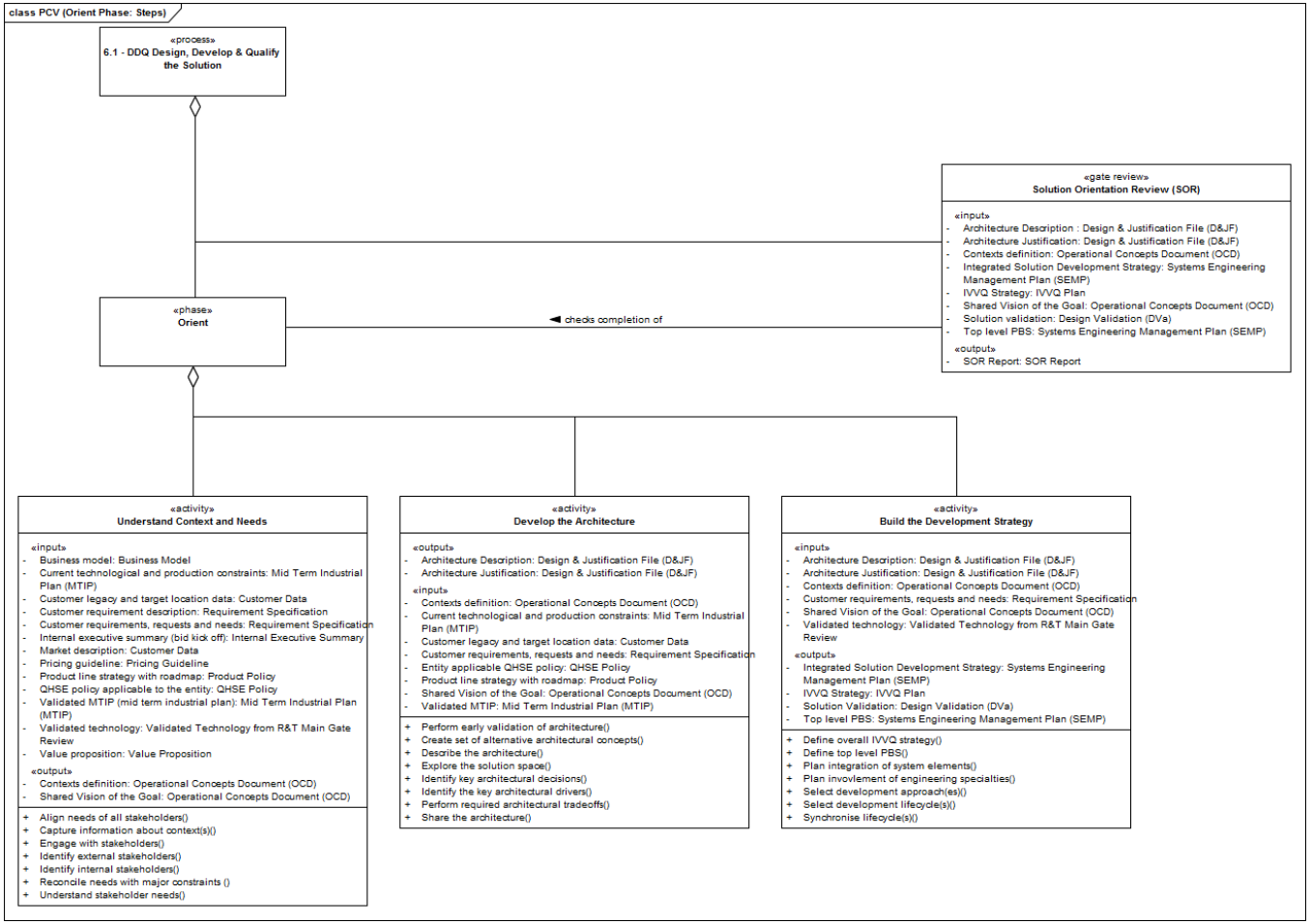

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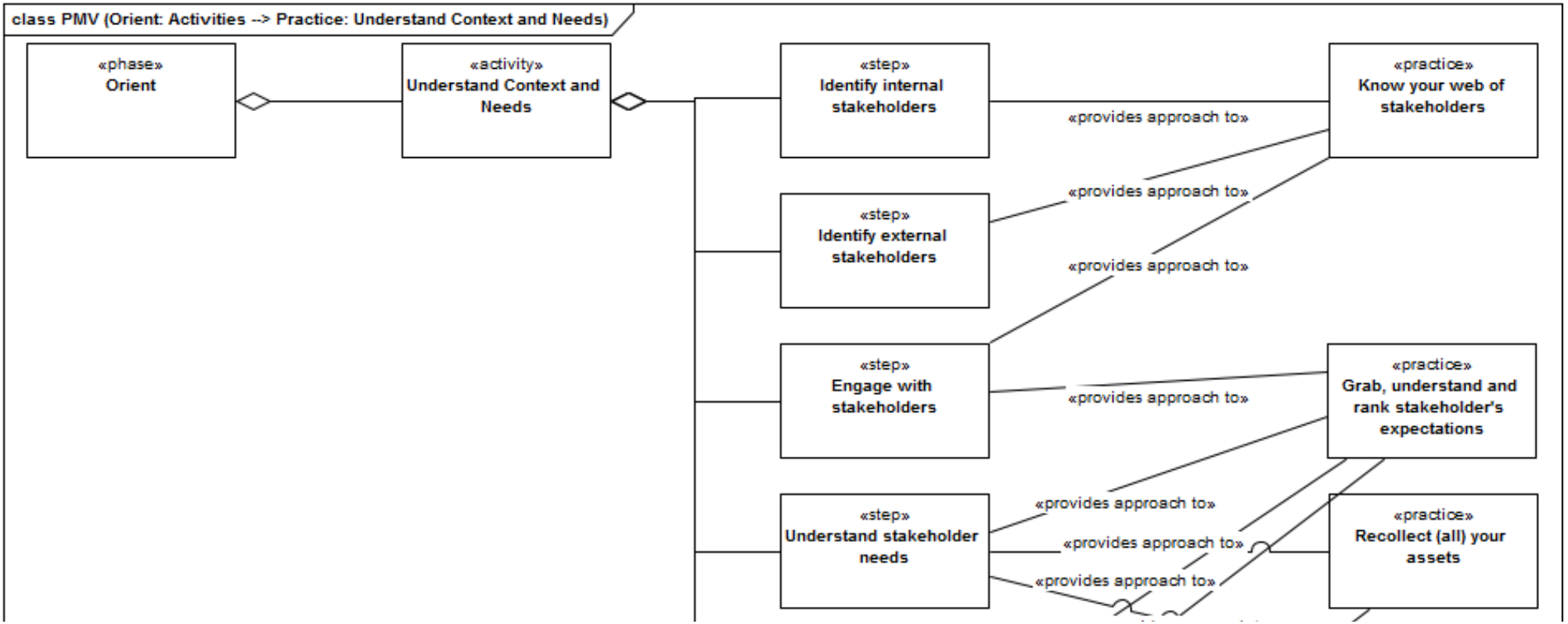
Resulting model



Summary & conclusions

- Model now in service as a reference for further activities
- Feedback to process owners on consistency of naming and terms

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