

INCOSE MBSE Patterns Working Group

Project Charter

1 Project Name:

The name of the project is the MBSE Interface Patterns Project.

2 Project Objectives and Summary:

The objectives of project are to:

- 1) Improve shared knowledge and more effective life cycle engineering of Interface-related aspects of systems, through the definition and use of Interface-related MBSE Patterns.
- 2) Make available S*Patterns related to Interfaces, expressing common configurable modeled aspects of systems, at different levels of abstraction:
 - a. Most abstract: The S*Interface Pattern for all interfaces (S*Metamodel level)
 - b. Domain specific or technology specific S*Interface Patterns
 - c. Organized into a library illustrating the propagation upward and downward of modeled aspects at different levels of abstraction/specificity
 - d. Suitable for use and support of targeted life cycle tasks (e.g., generation of Interface Control Documents, etc.)
 - e. Suitable as guiding examples for other domains or technologies not directly addressed
- 3) Consistent with the Patterns Working Group precepts of:
 - a. Seeking the simplest model representations necessary for practical use in targeted domains, having differing demand levels and expectations
 - b. Maintaining portability and mappings across different modeling languages, tools, and information systems, as these continue to mature and evolve, and demonstrating that capability
 - c. MBSE Patterns must be PBSE configurable for specific instances
 - d. Interface Patterns should connect to the larger System Pattern representation that is the scope of the Patterns Working Group
- 4) Informed by the history of interface engineering across domains, the perceived current and future needs and priorities of the engineering community, and related efforts underway across different INCOSE and external working groups, standards bodies, trade groups, enterprises and institutions, and other communities of interest.

3 Project Deliverables:

- 1) General S*Interface Pattern (S*Metamodel level)
- 2) Targeted domain specific or technology specific S*Interface Patterns, to be identified
- 3) Library organization of these patterns, based large scale pattern structures to be explored

- 4) Demonstrations on targeted toolsets, modeling languages, and information systems, including generation of targeted priority views, documents, or extracts useful in the system life cycle
- 5) Joint deliverables with other working group projects (e.g., the Innovation Collaboration Ecology Demonstration Project)
- 6) Specific interface examples and teaching or educational materials.
- 7) Means of access to the Deliverables.

4 Project Team:

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5 Project Schedule:

Schedule, including meetings, milestones, and overall is to be determined by the team. It is suggested that key milestones include INCOSE IS and IW events, along with regular periodic meetings and deliverables.

6 Project References:

Project web site:

http://www.omgwiki.org/MBSE/doku.php?id=mbse:patterns:interface_patterns_team#interface_patterns_team

See other references listed on the project web site.