Models and Information Sharing for System Engineering in Extended Enterprise
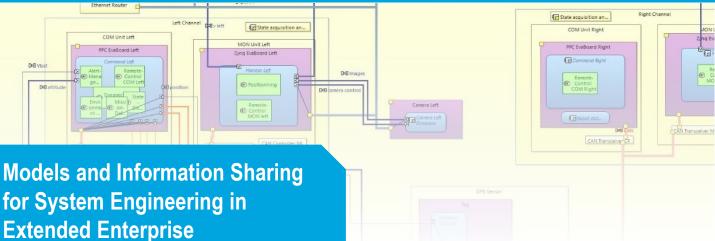
MOISE Project

Define and validate a Collaborative Model-based approach for System Engineering (MBSE) in Extended Enterprise.

Market & Needs

- Reduce the costs of Development and V&V of embedded systems
- Enable seamless co-engineering between Industrial Partners
- Manage requirements waterfall with agility and continuity

Tools and Technologies of interest

CAMEO (No Magic), CAPELLA (PolarSys, Eclipse), MODELICA, COSIMATE (KIASTEK), OPEN-ALTARICA (IRT SystemX), OPEN-MBEE (NASA-JPL), SCADE ARCHITECT (Esterel), SIMULATIONX & PROSIVIC (ESI), STIMULUS (Argosim)

VALUE PROPOSITION

For Systems architects of the aerospace supply chains companies, provide :

- Validated Model-Based methods, guidelines and toolchains.

- A scalable modeling platform offering multi-tool integration and strong collaborative capabilities

- A Structured survey of MBSE/MBSA processes, projects, methods, tools and SE standards

Project figures
- 7,7 M€ over 3 years (2016-2019)
- 14,6 Men-year
- 16 firms, 3 public research institutes
- 1 PhD, 3 post-docs

Collaborations
IRT SystemX (contractualisation under way)

Project members
- Industrial Firms: Airbus, Airbus DS, Liebherr, Safran, Thales Avionics, Zodiac Aerospace
- Consulting Firms: Altran, Samares Engineering, Sogeti High Tech
- Tool Vendors: Argosim, Ansys Esterel, ESI Group, Keonys, Kiastek, Softeam, Squoring Technologies
- Public Resarch Institutes: ISAE, IRIT, LAAS-CNRS, S/C: ONERA