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Systems Modeling and Simulation Community (*SMS Community*)

April 12, 2022

Systems Modeling and Simulation:*

The use of interdisciplinary functional, architectural, and behavioral models (with physical, mathematical, and logical representations) in performing MBSE to specify, conceptualize, design, analyze, verify and validate an organized set of components, subsystems, systems, and processes.

*SMSWG – Terms & Definitions: https://www.nafems.org/about/technical-working-groups/systems_modeling/smstermsdefinitions/s-u/

Agenda

- **Opening of meeting:** Peter Coleman, SMSWG Chair
- **Main Presentation:** 'Capabilities for Systems Analysis developed by Dassault Aviation within EXCELAB (EXTended Collaborative Engineering LAB) Project' -- Eric Thomas, Dassault Aviation
The presentation deals with a new process, which tries to be more flexible and efficient, for collaborative development of aircraft systems. For Dassault Aviation, it is based on standards such as SysML and Modelica/FMI; and process and tools (Dassault Systèmes 3DEXperience ...) to enable it. In particular it tries to bridge the gap between traditional MBSE world (often described using SysML/UML ... standards) and Analysis world (here based on Modelica/FMI) to design complex systems in cooperation. The process is built on many bricks developed during several projects and is currently enhanced within the DGAC EXCELAB project with other major airframers and design partners to get a common global method for efficient collaborative development of future aircrafts.
- **Update from the Terms & Definitions Focus Team** - Greg Garstecki, Terms & Definitions Focus Team Lead
- **Open Discussion**