Systems Engineering DSIG

- Tuesday, June 21, 2022

Highlights from this Meeting:

**SysML v2 Update and Demo** – S Friedenthal, HP de Koning, M Bajaj
- SysML v2 language
- Metadata definition and language extension
- Representing geometry
- SysML v2 API & Services update
- Recipes and API Cookbook

**SysMD: Experiences from using KerML for inclusive modeling and consistency checking of innovation roadmaps** – Dr. Christoph Grimm, Damun Mollahassani
- EU Project funding
- Simplified textual modeling language based on SysML v2
- Includes constraint solver
- Integration with document-based view using annotations
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Highlights from this Meeting (cont.):

- **Analysis Demonstration using Maple with SysML 2.0 - Paul Goossens**
  - Integration of math solver with SysML v2
  - Leverages base capability of SysML v2 API to extract eq’s from SysML v2 model
  - Demonstrated application to solve turbofan analysis (> 100 equations)

- **UPR 2.0 - Charles Dickerson, Siyuan Ji**
  - UPL Profile for Rosetta adopted in 2019
  - Mathematical formalism to analyze/transform relationships among design variables
  - Considering alignment with SysML v2

- **Modeling Tool Integration Plugins (MTIP) – Karina Martinez, Trent Severson**
  - Developed by Aerospace Corp
  - Provides XMI alternative (HUDS XML) to provide EA and Cameo interchange

- **INCOSE Systems Engineering Vision 2035 Highlights - S Friedenthal**
  - Identifies factors that influence SE practice and how SE must respond