# Hybrid Simulation Standards One Pager

**Problem statement(s)**

- Different industries are working independently to address the integration and interoperability challenges when modeling, simulating, and integrating different (external) components in a heterogenous system simulation framework.
- As a consequence, different and overlapping standards are developed in each industry segment, to address the (local) challenges in that specific industry, however, these industry-specific standards do not facilitate cross-industry exchange and reuse of modeling and simulation concepts, formats, interfaces and standards.

**Objective(s)**

- The Hybrid Simulation Standards initiative aims at establishing a cross-industry expert group to align on best practices and standardization to enable better reuse, adoption and knowledge exchange.
- The long terms objective is to work towards a commonly agreed and standardized modeling and simulation approach, which connects the different industries, and at the same time is compatible with the existing approaches used in each individual industry.

**Planned Initiatives**

- Formation of a 'Hybrid Simulation Standards' Working Group within the context of an industrial consortium, corporation and/or standardization organization, with representatives from different industries/domains (e.g. Automotive, Industrial, Aerospace, Defense, Semiconductors, etc.)
- Identify the relevant (and overlapping standards) and explore commonalities, cross-connections and alignment themes in these standards.
- Sharing best practices, requirements, and use cases in terms of modeling and simulation approaches at events/workshops/ conferences
- Collaborate to define required interfaces for model and simulation tools, with the focus on interoperability, reusability, scalability, and modularity. Interfaces should be made practical in terms of standardized APIs supported by reference implementations and/or functional prototypes.
- Definition and creation of a pilot project and demonstrator to validate the proposed concepts and prototype implementation, to validate the new methodology and interfaces and/or (draft) standard proposed.

**Timeline**

- TBD