

Summary of the On-Line Q4 LOTAR Workshop 2 - 5 December 2024

The Q4 2024 LOTAR workshop was a full on-line event. It was well attended by more than 30 participants. The highlights of the meetings include:

2025 Meeting Dates

- 10-13 March 2025 in Hamburg (NH Hotel Horner Rennbahn) (prostep ivip)
- 23-26 June 2025, on-line (PDES, Inc.)
- Mid of September 2025, Location TBD, USA (PDES, Inc.)
- 1-4 December 2025, on-line (prostep ivip)

For related dates, also see <https://lotar-international.org/dates-communication/>

General Sessions

- Jean Brangé reported on the STEP Roadmap sessions and STEP AP242 Ed 5.
- An update for the LOTAR Project Charter is in progress.
- Resource requirements were discussed for a potential new Work Group for Electronics (PCBs/PCAs), and for relaunching the Engineering Analysis & Simulation WG.

WG “LOTAR 3D Mechanical CAD and PMI” (Parts 1xx)

- JAMA/JAPIA presented their PMI issues, which overlap with CAX-IF User Group requirements.
- Assembly PMI Pilot status: Datakit presented results using STEP AP242 Edition 4 XML with External Element References to STEP geometry using UUID.
- CAX-IF User Group and Implementor Group discussed a variety of topics, including Assembly PMI, Composites, Kinematics, Materials, Sheet Metal, Welding, Assembly and Installation with Fasteners, and Hole Features.
- EN/NAS 9300-1xx document status:
 - Part 100 Ed.2 document is ready for ASD-STAN publication
 - Part 110 Ed.3 document is ready for internal ballot
 - Part 120 Ed.2 document is reaffirmed.

WG “LOTAR Product Data Lifecycle Management” (Parts 2xx)

- prEN and NAS versions of 9300-210: reviewed comments from external publication ballot and worked on resolution.
- Part 230 - “As- Built/As-Delivered/As-Maintained” is ready for internal ballot.

WG “LOTAR of Electrical Wiring Harness” (Parts 4xx)

- Continued to add issues and user stories to Redmine, organized for AP242 Ed.5.
- Working on logistics for a workshop on “Mating and Assembly Group Occurrence” in March 2025 in Hamburg.
- Developing AP242 Ed.5 requirements for Electrical.
- Worked on use case for Conductive Overbraids.

WG “LOTAR of Model Based Systems Engineering” (Parts 5xx)

- Assigned tasks to review and finish Part 500 Use Cases and Bibliography.
- Reviewed LOTAR MBSE Roadmap, deliverables and dependencies
- Demos were given for LOTAR utilities as a MBSE validation tool, as well as for the Part 515 prototype (Model Report), and feedback was provided.
- Reports were given on OMG’s planning for CASCaDE, the prostep ivip Digital Data Package project, the DETECT project, and the A&D PLM MBSE project.
- Reviewed the MBSE-iF scope, structure, and goals in relation to LOTAR MBSE and CASCaDE.
- Discussed the need for a fundamental MBSE semantic metamodel for interoperability between UAF and Arcadia - Agreed to include it as CASCaDE priority use case.
- Provided input for INCOSE IW’25 interoperability session agenda.

Summary of the CAX-IF meetings

The CAX-IF Round 55J kick off meeting was very well attended with 19 participants from 11 organizations. An additional 14 Subject Matter Experts provided detailed input on a variety of topics. The highlights from the meeting include:

- Composite Materials updates to AP 242 and Recommended Practices Documents
- STEP Viewer Survey
 - The survey was sent out November 25
 - Responses are due the end of January 2025
- Round 55J scope discussions
 - Assembly PMI with External Element References (EER)
 - Composite Materials
 - JAMA/JAPIA Graphic and Semantic PMI Models
 - Kinematics, also including EER
 - Material Assignment
 - Persistent IDs for Design Iteration and Downstream Consumption
 - STEP File Analyzer and PMI Placeholder testing
- Details of the Round 55J review meeting in Hamburg, Germany, March 2025
- Joint Session with CAX-IF User Group & LOTAR 3D Mechanical including a status of the current Assembly PMI Pilot #3
- Joint meeting between CAX-IF Implementor and User Groups to discuss status on requirements. Two new big topics, Sheet Metal and Welding, were discussed.