

Summary of the LOTAR Workshop held in Hamburg, Germany 10 - 13 March 2026

The Q1 2025 LOTAR workshop was a hybrid face-to-face and online event. It was well attended by 31 attendees onsite, plus more than 50 remote participants. Highlights of the meeting included:

2025 Meeting Dates

- 10-13 March 2025; Hamburg, Germany (prostep ivip)
- 23-26 June 2025; online (PDES, Inc.)
- 16-19 September 2025; Seattle, WA, USA (PDES, Inc.)
- 1-4 December 2025; online (prostep ivip)
- For related dates, also see <https://lotar-international.org/dates-communication/>

General Sessions

- Presentation about STEP Roadmap sessions and planning for STEP AP242 Edition 5.
- Discussed ongoing LOTAR Project Charter update.
- The Engineering Analysis & Simulation (EAS) WG is still on hold, but preparation for scope and next steps have been done.
- Introduction of the prostep ivip “FDX” project for Functional Data Exchange.

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

- Continued work on the next edition for LOTAR Part 115 “Explicit CAD Assembly Structure”. The related concept of alternative shapes may need to be defined in a dedicated document in conjunction with other groups.
- Reviewed results of the third pilot project for the future Part 126 “CAD assembly structure with Semantic Product & Manufacturing Information (PMI)”, using the AP242 Ed. 4 Domain Model.
- A delegation of the Japanese Automotive Manufacturers’ Association (JAMA) attended in person and provided excellent presentations for PMI requirements, and fasteners.
- Held several joint working groups initiatives (PDM IF, EWIS, PDES, Inc. Hole and Fastener, JAMA) for the future LOTAR Part 126 on “Structural joints for assembly and installation”.

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

- Finalized Part 205, which will replace the LOTAR Technical Specification 200-1 “Product Structure Validation”.
- Reviewed Part 200 (“Common Concepts for PLM”) to prepare an edition 2, including interesting discussions with the Electrical Wiring Harness working group for cross-references with Part 400.
- Shared discussions with others working groups: “alternative shapes” with Mechanical CAD and PMI, “ISO/IEC 81346 RDS” with Electrical Wiring Harness.
- Presentation of PDM-IF use cases: Mating Definition (Fasteners), External Element Reference, Data Classification for Export Control.
- Presentation of JAMA work with STEP AP242.

WG “LOTAR Composites and Advanced Manufacturing” (Parts 3xx)

- Continued work Part 300 (“Fundamentals and Concepts for Long-term Archiving and Retrieval of Composites”).
- Review user story status and priorities together with the CAX-IF User Group.
- Discussed draft of updated CAX-IF Composite Material Recommended Practices

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

- Continued work on Parts 400 and 410.
- Joint session with PLM and Mechanical CAD & PMI working groups to discuss external references and the future part for “Structural joint for assembly and installation”.
- Joint session with the Product Data Lifecycle Management team to develop common concepts between Part 200, 300 and 400.
- Exchange with other groups on Reference Designators (IEC 81346).
- Group review of Electrical Wiring Harness XML tutorial.

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

- Defined contents of the Statements of Work for the 2025 activities related to the LOTAR MBSE Parts 510, 520, and 550.
- Presented and reviewed the CASCaDE OMG RFP plan, including MBSE-iF scope, structure, goals, and alignment between LOTAR MBSE and CASCaDE.
- Presented and reviewed: RAS OMG.
- Regarding Part 530 on architecture models, identified the need of an agnostic Architecture Description Framework (ISO 42010), for interoperability e.g. between UAF and Arcadia.
- Reviewed INCOSE IW outcome.
- Reviewed the scope and provided recommendations for a future relaunch of the EAS working group.

Summary of the CAX-IF meetings

The CAX-IF meetings were highly successful with the following highlights:

- Round 55J results were discussed along with various technical issues.
- Material assignment and assembly-level PMI were tested for the first time
- The scope was extended on Kinematics and Hole Features
- Testing continues on part-level PMI, persistent IDs, and Composite Materials
- Joint meetings were held with the CAX-IF User Group and the LOTAR
- 3D Mechanical CAD team to discuss current and future requirements

For Round 56J, the CAX-IF will test the following:

- Further scope extensions on Material assignment and Kinematics
- Continued testing of PMI, Hole Features, Persistent IDs, and Composites
- Focusing on new capabilities introduced with STEP AP242 Edition 4

The MBx-IF User/Vendor roundtable was very well attended with 23 people physically there and another 36 on-line. The following topics were covered:

- CAX-IF Implementor Group (IG) & CAX-IF User Group (UG)
- EWIS-IF IG & UG
- PDM-IF IG & UG
- MBx-IF Joint Topics:
 - Assembly joints and Fasteners
 - Export Classification
 - STEP Viewer Survey
 - External Element References
- STEP File Analyzer & NIST Update
- Vendor Support of STEP and LOTAR, with updates provided by 11 vendors