

Summary of the LOTAR International Workshop March 17th to 19th, 2020 – Online

Project management:

- Review of the status of payment of LOTAR 2020 fees by the European and American members; review
 of the 2020 LOTAR budget plan and start of the preparation of 2020 statements of work based on current budgets.
- Status of progress of AP239 ed3 PLCS: overview of the close interdependency of the ISO 10303 Part 4000 "Core model", integration layer between the Domain models of AP239 ed3 PLCS, AP243 ed1 MoSSEC, and future AP242 ed3. Ongoing actions to secure resources by stakeholders' associations.
- Status of progress of AP243 MoSSEC ed1: Request of a 9 months extension to ISO for the development of AP243 ed1 DIS; MoSSEC standard is planned as the manifest format for the LOTAR P520.
- Status of preparation of STEP AP242 ed3 project, as part of AP242 5 years roadmap, with request for inputs from the interested LOTAR WGs.
- Status of the CAx-IF: Initiate the backlog of requirements of the CAx IF user group, including the needs of the LOTAR Mechanical and Composite WGs, with the introduction of a web collaborative tool.
- Status of the EWIS-IF: restart of EWIS IF User Group bi weekly confcals in Feb. 2020; ongoing Test Round 1 for the EWIS IF Implementors Group with 3 vendors; DS joining in Feb. 2020 for next T-Rs.
- Status of the PDM-IF: refinement of business requirements and use cases for exchange and LT archiving of "as designed" and "as planned" product structure, and of the Visual Issue Management use cases.
- Status of the CAE-IF: on hold for 2020, due to the shift of the setting of the CAE IF User Group.
- Overview of ISO 8000 "Industrial data Quality Framework": potential links with LOTAR objectives.
- Summary of OAIS V3 draft, including the interoperability framework: several conference calls held in Q1 2020 with the CCSDS OAIS experts, for the presentation of the main enhancements of OAIS V3 (draft).
- Next LOTAR online meeting on the 2nd 5th of June 2020, hosted by PDES, Inc. (the LOTAR MBSE WG will have an online meeting end of May).

WG LOTAR "Basic and Common Process" parts (Parts 00x and 0xx)

- Development of LOTAR Part 132 "Structural joins for assembly & installation".
- Continuation of the review of the draft AP242 Recommended practices for Holes and Fasteners.
- Review/triage of PMI bugs for AP242 Edition 3 in order to support LOTAR requirements.
- Coordination with the CAx Interoperability forum, User and Implementer Group

WG "LOTAR 3D Mechanical CAD with PMI" (Part 1xx)

- Development of LOTAR Part 132 "Structural joins for assembly & installation".
- Continuation of the review of the draft AP242 Recommended practices for Holes and Fasteners.
- Review/triage of PMI bugs for AP242 Edition 3 in order to support LOTAR requirements.
- Coordination with the CAx Interoperability forum, User and Implementer Group



WG "LOTAR Product Data Management" (Part 2xx)

- Part 210: Developed option and effectivity sections against AP242e2 and STEP 4000 core model.
- Part 230: Developed term definitions and refined figures for as-built elements.
- OAIS Interoperability Framework: Reviewed new material for application to LOTAR functional architecture and meta data parts.
- A&D PLM AG Material: Reviewed "Multi Views" WG material against current use case for as-designed to as-built product structures.
- Use Case Development: Reviewed current PDM-IF state of development.
- Review and Plan PDM-IF Dataset Development: Reviewed Jotne dataset status and discussed how we might manage changes to the datasets for different use cases.
- Integration with other working groups not enough time so plan to schedule outside of the workshop.

WG "LOTAR of Electrical Harness" (Part 4xx)

- Preparation of LOTAR 2020 Electrical Harness requirements for the EWIS IF User Group.
- Preparation of LOTAR Elec. requirements for the ISO AP242 5 years roadmap including AP242 ed3.
- Status of ongoing LOTAR EWH pilots developed by Datakit and Core Technologie:
 - o Short presentation of the AP242 ed2 xml 3D PDF viewer from Datakit,
 - Progress of the Catia V5 => AP242 Electrical Harness interface of Core Technologie.

WG "LOTAR of Model Based Systems Engineering" (Part 5xx)

- Main focus of work has been developing a technical work plan for a Part 520 use case (in conjunction with Modelon). The team have been working on mapping the proposed Boeing manifest (BOE-MIC) with AP243, along with understanding what needs to be in a manifest and what needs to be in an AIP. Additionally, mathematical models have been developed that will be released as part of the Model Based Engineering Demonstrator Reference Models (set of public test cases).
- Continuing to progress the standards documentation. An internal draft Part 500 has been created (based on Part 200) and is currently being edited by the team. An initial version of Part 520 (based on Part 620) has also been created.
- Working on ways to engage other organizations involved with MBSE-related activities (e.g. NAFEMS, INCOSE)
- Representatives from Dassault Systemes were involved in the March workshop. We explained the Part 520 use case and the underlying need for them to support AP243. The WG captured the team's ideas and circulated a generic version of an Application Enhancement Request for all tool vendors.
- LOTAR MBSE activities were presented at INCOSE IW (Jan 2020)

WG "LOTAR of Engineering Analysis and Simulation" (Part 6xx)

• Working Group "on hold", by lack of a leader representative from manufacturers.