

Summary of the LOTAR International Workshop March 10th to 13th, 2019 – Asheville, North Carolina

30 on-site participants plus 4 persons via teleconference. Parallel meeting with the CAx Implementer Forum.

Project Management

- The team discussed the 2019 statement of work and encouraged the Domain WGs to focus on planned tasks.
- There was discussion with regards to having Boeing distribute the Stratoliner Airframe models for test case use in the various Implementor Forums. Boeing must verify with their Supplier Mgmt. group to make sure this has been approved and the copyright information is not an issue.
- Reviewed US and EU budgets and membership forecasts for 2019 and prioritized potential pilots based on current budgets.
- Discussed and reviewed EN/NAS 9300-xxx ballots and status for publication. ASD-STAN has a new requirement to submit a NWI for each part that is a new release. Each WG will need to have a milestone in their work plan for this activity.
- Refined LOTAR participation marketing material to include a possible tri-fold, brochure etc. to attract new membership.

WG “LOTAR of 3D CAD Mechanical and PMI” (Parts 1XX):

- Reviewed and discussed LOTAR Mech/PMI Requirements with CAX-IF
- Discussed the following Pilot Schedule
 - Pilot 1 focus on Hole features (S2 2019)
 - Pilot 2 simple assembly hole and fastener (S1 2020)
 - Pilot 3 complex assembly of hole and fastener (S2 2020)
- Reviewed and updated the PMI Entity Gap analysis
 - Created bugs for AP242ed3
 - Update of ISO and ASME Standards by Bryan Fischer
 - There is an ISO DIS 22081 that will be available soon.
- Discussed and proposed updates for LOTAR Mech/PMI Webpage.
 - Added a manufacturing features section
- Reviewed and updated LOTAR Mech/PMI WG requirements to AP242 ed3

WG “LOTAR of PDM information” (Part 2XX):

- The team prepared the following statement of work plan for 2019:
 - Complete Parts 210 and 230 and move them from a technical specification to a full LOTAR part.
 - Continue mapping of the LOTAR PDM concepts with the STEP P4000 Core Model, results from the AP242 ed2 and AP239 ed3 harmonization project. Proposed new work item to validate mapping.
 - Propose a use cases for the PxM-IF e.g. effectivity, etc.
 - Develop participation plan to support the PxM-IF / User Group.
 - Participate in the Basic & Common Parts WG.

WG “LOTAR of Composite design” (Part 3XX):

- The team reviewed and continued work on the AP242 Composite Recommended Practice for validation properties.
- Continued to work on Part 300 Fundamentals and Concepts of Composite design.
- Plan to have an internal draft of Part 300 ready for the September 2019 Offsite.
- AP242 Additive Mfg. project presented to the CAx-IF.
- Reviewed and discussed composite requirements to the CAx-IF

WG “LOTAR of Electrical Harness” (Part 4XX)

- Reviewed and discussed the titles of LOTAR electrical parts, content and planning. Proposed to change the name from electrical harness to something more generic as the scope is broader than harness.
- Reviewed presentation of the status of progress of the Datakit pilot of NX ⇔ AP242 ed2 DIS interface for electrical harness. The team also reviewed the cross sectional model.
- Continued technical discussions on the AP242 ed2 DIS2 model.
- Prepared the launch of the Electrical Implementer Forum, under the CAx-IF, with a planned extension to the future PxM-IF, for use case support for the exchange of electrical meta data or involving configuration and change management data.
 - Submitted draft invitation letter to launch the Electrical User Group (kick-off confcall 16th of April)
 - Started the identification/description of main use cases for electrical wiring harness data exchange and long term archiving.

WG “LOTAR of Model Based Systems Engineering” (Part 5XX)

- Various face-to-face meetings were held (generally 4-5 people attending). WebEx was held on Wednesday 13th of March, to review progress with joint PDES/LOTAR team
- Draft P500 document was created and continues to progress.
- Created MBSE roadmap including coverage, standards and activities.
- Discussion with EAS WG to ensure alignment and to better understand process.
- Held meeting to discuss integrating the MoSSEC requirements into the FMI and SSP specifications.
- MBSE for PDES team has contributed an aggregation of use cases from the different consortia to help us formulate and prioritize our LOTAR deliverables.
- ProSTEP provided results of the SmartSE WPs. Our interest is the analysis and simulation classification template, which will be considered as an addition to our P520 process documentation.

WG “LOTAR of Engineering Analysis and Simulation” (Part 6XX)

- Started the process to create the first NAFEMS “What is” format to develop a handout on STEP AP209 for FEA data.
- NAFEMS World Congress (17-20 June 2019 – Quebec, Canada):
 - Prepared the outline of the presentation;
 - Discussed the detailed content and timing of the “round trip” live demonstration.
- Drafted the statement of work for LOTAR EAS Pilot Study #4 “Prototype of AP209 ed2 Translator Supporting FEA Input Data with Validation Properties”.
- Discussed the outline of LOTAR Part 600 “Fundamentals and Concepts for LOTAR of EAS information” and reviewed the draft of LOTAR Part 620 “LOTAR of FEA Structural Analysis information”.
- Reviewed and updated the ap209.org website.

Coordinated with LOTAR MBSE WG on shared interests (metadata, simulation, analysis, etc.).

Next LOTAR workshop: 20 – 23 May 2019, Toulouse, FR, hosted by Airbus.