

## Summary of the LOTAR International Workshop

### December 4<sup>th</sup> to 6<sup>th</sup>, 2012 – Darmstadt, Germany

26 on-site participants plus an additional 20 persons via teleconference.

Parallel meeting with the CAx Implementor Forum.

#### Project management

- Final review and closure of the 2012 LOTAR budget plan with the contracts to service providers.
- Confirmation of the list of A&D members for 2013; finalized 2013 LOTAR project and budget plans, and formal approval by a vote of the LOTAR active members.
- Publication in January 2013 of: - the update of the CAD 3D PMI web page, - a new page with the list of A&D companies having projects in operation or in development based on the LOTAR standards. <http://www.LOTAR-International.org>
- Summary of the STEP AP242 project report to the LOTAR team: planning of finalization of AP242 ed1 DIS documentation, of DIS ballot and DIS ballot comments resolution; summary of the conference call with the PLM vendors (Sept. 2012). Planning for preparation of STEP AP242 ed2 project: planning overview, organization of a workshop for the development of AP242 ed2 white paper (Sept. 2013, USA).
- Launch of Phase 3 activities of PDM harmonization efforts between AP239 PLCS PSM and AP242 BO model; planned final completion by end of Q2 2013.
- Continuation of the management of consistency between the LOTAR standards, the associated standards / recommended practices for product information models, and their implementer forums.
- Review of the draft presentation to prepare the launch of the future PDM IF in 2013; planned LOTAR funding to support the PDM IF.
- Next LOTAR workshop: 11<sup>th</sup> – 13<sup>th</sup> of March 2013, in Gaithersburg, USA, hosted by NIST.

#### WG “LOTAR of CAD 3D PMI” (Part 120, Part 125)

- Discussion and brainstorming for the use cases and started planning for a proof of concept for part 120 V2.
- Initiated gathering of requirements for STEP AP242 Edition 2.
- Started the development of a PMI entity list which maps to STEP APs and Recommended Practices.
- Reviewed CAx-IF approach for “External Element Reference”; captured requirements for Proof of Concept pilot for Part 125.
- Presentation of the scope and planned activities of the “3D Visualization” WG and how that relates to 3D PMI working group.
- Began capturing use case requirements for Part 125; identified applicable industry standards and reviewed potential gaps and/or deficiencies in those standards
- A presentation of the status of STEP interfaces for 3D PMI by the main CAD vendors (Dassault Systèmes for CATIA V5, Siemens PLM for NX, Theorem, CT Core Technologies, Datakit, ITI, Kubotek).
- Initiated draft for LOTAR 3D PMI “blip” (component summary) for AIA, ASD SSG initial draft available.

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

- Part 200 “Common Concepts for Long term Archiving and Retrieval of Product Structure Information” is now on internal ballot until March 2013.
- The structure validation property will be a technical specification, tentatively, TS-9300-200-1

- EuroSTEP presented progress to date on the Part 210 PLCS DEX Finalization project. They plan to produce two DEXs, a DEX for metadata suited for information packages, and a DEX for Part 210 itself. The metadata DEX will be delivered to the metadata team for continued development.
- The PDM team has assigned greater priority to PART210 ed2, which adds Effectivity and Options to “as designed”, over Part 220 “as planned”. At present, member companies have expressed a greater interest in “as built” over “as planned” product structure.
- The Metadata team discussed their current focus topics, namely, the DEX for “meta data for archive packages” and the associated use cases.
- PDTec presented a status of the harmonization effort between AP242 BO Model and AP239 PLCS PSM. The harmonization is being done in SysML and it was noted that the protocols are similar on Effectivity but much different on Option management.
- The work plan for 2013 was discussed.

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

- Progress in the resolution of the open issue for the Boeing patent limiting the use of 3D approximate explicit representation for Composite design. Still not fully solved; might be solved in the next month at the latest.
- Update of the status of interoperability tests for composite design of AP203 ed2 (CATIA V5/V6, FiberSIM): detail test report planned in the next weeks.
- Presentation of Dassault Systèmes STEP AP203 composite interface status.
- Discussion on the different 3D representations of the composite structures (based on surface and contour, based on 3D tessellated solid, 3D solid with PMI) and the associated use cases.
- Preparation of the 2013 work plan, especially the tasks after the solving of the patent issue: vendor’s workshops, potential new members, recommended practices, tests...

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

- Presentation and discussion of test cases for LOTAR of physical elec. harness for design and construction (“stick line” and “3D as installed” representations).
- Continuation of the identification of the essential information to be preserved. Review of the list of glossaries for electrical harness (ISO TC 20, NASA, IEEE, IEC, VDA, ...)
- Presentation by M. Ungerer of the modules of the VEC specification; discussion on the draft mapping between the VDA KBL to the VDA VEC specification. LOTAR team agreement to fund a training session on the VDA VEC specification, as a key input for the future AP242 ed2 BO model for Electrical Harness.
- Need to consolidate the Electrical Harness use cases for the Sept. 2013 AP242 ed2 workshop, as input for the preparation of the STEP AP242 ed2 project white paper (scope, use cases, priorities, resources, planning, ...)
- Preparation of the next actions for Q1 2013.

### **WG 3D Visualization**

- Review of the LOTAR “3D visualization” web page.
- Definition of terms candidates for the part 007 edition 3.
- Discussion of use case scenarios and of their relationships.
- Review of the “3D visualization” work plan until March 2013.