

## Executive summary of the STEP AP 242 Workshop held on the 26<sup>th</sup> of March 2014 in Paris

- STEP AP 242 technical documentation has been sent to ISO for publication. Planned publication of AP 242 ed1 as “International standard” in June 2014.
- Review of the business requirements of the French industries regarding the use of international standards enabling CAD and PDM information interoperability.
  - The Gifas “Digital continuity for production” WG has presented 2 uses cases for CAD and PDM collaborative processes in the supply chain requesting the use of AP 242 standard.
  - The Airbus group has summed up the needs of standards to support its activities
  - The French automotive industry confirms its interest to use the STEP AP 242 standard to support their PLM project VALdriv based on “3D as master”.
- Presentation of the history and project organization of the AP 242 ed1 project, first international project combining American and European aerospace and automotive industries.
- Presentation of the AP 242 ed1 standard: business requirements, supported use cases, functional scope. Introduction of new capabilities: PDM XML, efficient 3D tessellated model, powerful functionalities to support 3D geometric dimensioning and tolerancing for reuse by downstream processes. Then, 4 demonstrations by different vendors of AP 242 complementary aspects
- Importance of the participation of the industries in the STEP implementer forums, allowing speeding up the availability of operational solutions through the development of international recommended practices and interoperability test rounds by vendors.
- Presentation of the governance set up by the European A&D industry (ASD SSG) and of the recommendations to support the development of the AP 242 standard.
- Link between the ISO JT edition 2 project and AP 242: introduction of the STEP 3D exact geometry as normative, to replace the XT BREP (parasolid) model, considered as not open.
- Presentations by the main PLM vendors and integrators of their roadmap of implementation of STEP AP 242 interfaces:
  - Start of availability of applications for CAD assembly structure, 3D exact and 3D tessellated geometry.
  - Lack of STEP AP 242 XML PDM international recommended practices to speed up the availability of interoperable AP 242 COTS PDM interfaces.

	Assembly		3D exact	3D tessell.	User Def. Attribute	3D PMI , e.g. Geometric Dim. & Tol.		Composite		Kinematics		Machining Form Feature	Parametric / Constr History		
	P21 AIM	P28 XML				graphic pre-representation	semantic representation	P21 AIM	P28 XML	P21 AIM	P28 XML				
Dassault Systèmes	Avail.	Dev.	Avail.	Avail.	Avail.	Avail.	In dev.	Avail.	Planned				No plan	Planned	
PTC			Creo 4 + - When AP 242 is "IS" - High priority						-	-	-	-	-	-	
Siemens PLM	Avail.	Avail.	Avail.	Avail.	Avail.	Avail.	In dev.	In review		In review		No plan	No plan		
Datakit	Avail.	Dev.	Avail.	Avail.	Avail.	Avail.	In dev.	Future		Future		In dev.			
Eurostep	Avail.	Dev.	Not planned - main priority for PDM											Available / in development	
ITI	Avail.	Dev.	Avail.	Avail.	Avail.	Avail.	Avail. 2014								
Coretechnologie	Avail.		Avail.	Avail.	In dev.	Avail.	Avail. 2014	In dev.	-						
TechSoft3D	Avail.	No	Avail.	Avail.	Avail.	Avail.	In progress	In progress		No plan		No plan	Avail.		
T-Systems		Avail.	Not planned											Available / in development	

- Presentation of the STEP AP 242 ed2 project, with its main extension to electrical harness design.
- Confirmation of the interest to organise similar conferences in the future, in order to increase the awareness in the industries, and more especially in the Small and Medium Entreprises.