PDT Europe 2014

# Conference program

October 14 - 15 2014 Venue: Microsoft Issy les Moulineaux Paris, France

PDT Europe - two days of great presentations and meetings!
The major European event within Product Data Technology

# Shaping the PLM Platform of the Future



•eurostep-

**CIMdata** 

# **Welcome to PDT Europe 2014**

## Theme 2014: Shaping the PLM Platform of the Future

PDT Europe 2014 builds on the success of PDT Europe 2013 by continuing "Integrating PLM, SE and CM for lean, innovative and agile operations". This remains valid as the PLM Platform of the Future will have to support Systems Lifecycle Management. With PDT Europe 2014 we will continue to shape the PLM Platform of the Future and present findings as well as implementations providing valuable insights.

The PLM Platform of the Future is unlikely to be a monolithic system from one vendor. It follows that standards and openness are essential parts of the PLM Platform of the Future and we will look into the deployment of information standards for Systems Engineering, Product Lifecycle Support (PLCS), Managed model based 3D Engineering (AP242) and more. The adoption of a service oriented architecture and standards will give users control of their PLM platform and it will deliver capabilities to support the extended enterprise where the monolithic system approach is impractical.

PDT Europe 2014 will address the big picture PLM Platform and its components. We will look into ways to transform current PLM in a running business with legacy systems into a PLM Platform of the Future. Specific areas that the PLM Platform of the Future will have to support and that go beyond most of the current PLM implementations should be investigated at PDT Europe 2014.

#### Amongst these are:

- Modeling and simulation as part of PLM.
- Embedded software as part of the system.
- Product support, aftermarket and Internet of Things as part of PLM.
- Extended enterprise collaboration.
- IPR protection and security for global business.
- Cross disciplines PLM.
- The uptake and business need of Mobile for PLM.
- Circular Economy and the role of PLM.
- Regulatory compliancy.
- Master Product Data Management.
- Interoperability, harmonization and convergence of PLM and Systems standards.
- Obsolescence of Information Systems : Hardware and PLM Application.

#### We look forward to seeing you in Paris, France!

Håkan Kårdén, Eurostep, Sweden
Frederic Feru, Airbus, France
Peter Bilello, CIMdata, USA
Nigel Shaw, Eurostep, UK
Sune Horkeby, Siemens Industrial Turbomachinery, Sweden
Trond Zimmerman, Volvo AB, Sweden
Franck Ramaroson, Heme, Germany

Programme committee for PDT Europe 2014.

Registration for PDT Europe 2014 open
Opening of PDT Europe 2014 Welcome by the Organizers - Introduction of sponsors
The Emergence of the PLM Platform
The PLM industry is entering an accelerating era of end-to-end business platform enablement, and recent development and acquisition strategies illustrate PLM solution providers' direction and industry requirements. The shift towards enabling robust and resilient business platforms requires a fundamental change for both industrial users and PLM solution providers. This presentation will describe this major industry development and what this means to the future of PLM.
Peter Bilello, President CIMdata, USA
Industry voices on the Future PLM Platform
PLM in the Automotive Industry
The automotive industry is one of the most competitive with the challenge to manage innovation, supply chains, product complexity and product liability. It is also an industry where PLM has a strong foothold. This presentation will present drivers for PLM development in the automotive industry and outline the future use of PLM.
Steven Vetterman, General Manager ProSTEP iViP, Germany
Break in the exhibition area
Aerospace and Defence Through Life-Cycle Interoperability
The aerospace and defence industry is challenged by complex products with long life cycle, a complex supply chain and growing use of digital product information. There is a need to manage design, product and service information throughout the product lifecycle, including rigorous configuration management and the long term retention of information, where the data is 'created once and used many times'.
To face these challenges, ASD has a vision of through life-cycle interoperability that is 'All players of the global aerospace value network will be able to share digital information securely throughout the life of the products and services'
The presentation include the business challenges facing aerospace and defence as well as the work of ASD.
Yves Baudier, ASD SSG Chairman Airbus, France
Energy and marine sector
As a global leader in complete lifecycle power solutions for the marine and energy markets, innovation and sustainability are on top of the agenda for Wärtsilä. PLM is playing an increasingly important role in delivering innovative products and services. This presentation will look at the current trends in the energy and marine sectors and map this to the business of Wärtsilä. It will review current PLM efforts and look into what needs to be done in the future to remain competitive and what the expectations are from suppliers in PLM.
Shefali Arora, Manager, Engineering Systems Wärtsilä IM, Finland
Lunch

	Systems Engineering	Application Lifecycle Management Intellectual Property Management	Standards AP242 and AP239  Background and use
13.30- 14.00	Bridging the Requirements Gap with Model-Based Systems Engineering  Model based systems engineering (MBSE) is a very broad topic that many companies are just now trying to understand. This session will focus on the key challenges that companies adopting systems engineering face.  During the session, key insights and learnings from CIMdata's research and workshops will be shared.  Peter Bilello, President CIMdata, USA	Supporting Application Lifecycle Management (ALM) and the use of OSLC  Today's SMARTER products and services put high demands on the owners and contributors along the lifecycle. Many companies seek to better link up their organisations and the supporting IT to enable collaboration.  This presentation will include examples from product management, Systems Engineering, the SW lifecycle (ALM), PLM and wider engineering disciplines.  It will cover recent experience of the application of OSLC and outline a positioning of OSLC and PLCS.  Gray Bachelor Rational Development, CTO Office, IBM Software Group, UK	Background and use of STEP AP 242 in the European Aerospace and Defense industries  STEP AP242 is getting much adhesion and major implementations are already on their way.  This presentation will briefly give the background about STEP AP242 and the intended use. It will cover some key areas of deployment and finally outline the interdependencies with other key PLM interoperability standards.  Jean-Yves Delaunay Airbus, France
14.00-14.30	Systems Engineering need to be part of PLM  Product Lifecycle Management demands to integrate all engineering data of a product or service in order to provide full traceability of dependencies between information of different types and from various sources. Current Product Data Management solutions set the focus mainly on data representing physical items.  This presentation describes how all product data may be integrated with adequately emphasising the role of systems engineering. It is based on principles Airbus group is establishing for a group wide standardised but versatile approach, appropriate for the wide range of products and services offered.  Dieter Scheithauer, Senior Expert Systems Engineering Processes Airbus Defence and Space, Germany	Sustainable Intellectual Property management in Design and R&D Collaboration  Globalization and rapid change in manufacturing technologies provide immense opportunities to export and trade in its IP-intensive products, services and know-how to third-countries.  This session presents the security framework to enable organizations for selective and interoperable data sharing. It explores how to secure different levels of critical product information (data at rest, data in transition and in use.) and collaborate using digital rights management strategy.  Musthaq Hussain K Consultant - PLM Services SKF Technologies, India	Use of STEP AP239 PLCS to enable collaboration across disciplines and enterprises  PLCS was originally developed with funding from the aerospace and defence industries and government in US and Europe with the intention to deliver a standard to be used in many other industries.  With deployment over the last 10 years some patterns of deployment can be recognized. This presentation will give examples of deployment in a number of industries and scenarios. It will highlight the role that PLCS has played in the choice of solution.  The presentation will, based on experience, cover what is needed in addition to the core PLCS standard for industrial use. One such area is security, another how to handle mappings to legacy systems.  Finally the session will reflect on the theme for PDT Europe 2014 in relation to PLCS.  Nigel Shaw, Managing Director Eurostep, UK

14.30-15.00	Break in the exhibition area	
	Industry voices on the Future PLM Platform	
15.00-15.30	A call for PLM Information Infrastructure to better support the Infrastructure Business - Presentation of MINnD	
	Controlling and sharing information are key issues for the construction industry which must nowadays cope with major changes in the art, such as the project complexity, the eco-design development and new types of partnerships between actors (PPP, Concessions), the obligation to manage risks (anticipation, identification, evaluation, distribution) or the development of BIM (Building Information Modelling).	
	Drawings, notes and records, files have shown their limits. The first challenge is therefore to move to the item that is the finest information by establishing a structure and a standard for information exchange (recognized internationally) and adapted tools, either traversal, such as digital models, or specialized, as tools developed internally by each actor.	
	This presentation will present the themes for MINnD and give an update of the project status.	
	Pierre BENNING, BOUYGUES TP, IT Deputy Director France Christophe CASTAING, Director of the project BIM, EGIS International, France	
15.30-16.00	The need for PLM in consumer products markets. Circular Economy as the driver	
	Scarcity of material and energy resources combined with rapid degradation of the environment is forcing us to rethink both our economic and industrial systems including the manufacturing systems. Developing efficient and robust circular product systems for the Circular Economy will require excellence in IT, supporting multiple product lifecycles.	
	This session is about looking at the challenges that our future PLM systems will face to fulfil the expectations of enterprises in the circular manufacturing businesses. It will also look at the growth opportunities this new business paradigm would offer to the companies supplying PLM.	
	The EU project ResCoM will be introduced with special focus on the supporting information systems to be developed in the project.	
	Amir Rashid, Associate Professor, Department of Production Engineering	
	Royal Institute of Technology KTH, Sweden	
16.00-16.30	Shaping the PLM Platform of the Future: Where PLM meets Digital Business	
	New software business models, nexus of forces, and new IT-driven business paradigms are changing the land-scape for how manufacturers create, innovate, manufacture, and manage their products and product portfolios throughout product lifecycles. This presentation will describe these disruptive changes, how these changes will impact manufacturing business, and what IT professionals need to do to succeed in this changing environment.	
	Marc Halpern, Vice President, Research, Manufacturing Advisory Services Gartner, USA	
16.30-17.00	Panel discussion	
17.00-18.30	Socializing - Welcome Reception in exhibition area	
19.00	Socializing – PDT Dinner	

# Agenda PDT Europe 2014 | Day 2 — October 15

08.15-08.30	Opening of Day 2	
08.30-09.00	The future of PLM – the "Obsolescence of Information Systems: Hardware and PLM Applications"	
	PLM platforms of the future and of today are evolving rapidly, regularly delivering new capabilities and enhanced business value. However, as the Life Cycle of certain Industrial Products, from concept to support, is much longer than the life cycle of the PLM Solutions and their supporting IT infrastructure, companies face serious obsolescence management challenges. This problem is particularly acute in Aerospace & Defence.	
	The cost and complexity of maintaining in operation legacy PLM Solutions are high. The need to preserve and reuse critical design information for knowledge retention and legal requirement is a must.	
	The presentation will address principles, implementations and future projects that addresses PLM obsolescence management by leveraging Cloud, Virtualization and Standards.	
	Max Fouache, A&D Global Industry IBM - Member IBM Industry Academy, France	
09.00-09.30	Learning the lessons of PLM interoperability	
	Large organizations like BAE Systems continuously develop and change to meet new business, technology and product opportunities. To support these changes, the suite of industrial data tools and processes that provide the foundation for our evolving business also needs to change and adapt.	
	This presentation will provide a brief history of the evolution of standards-based interoperability between these tools in BAE Systems and its predecessor companies, from 1976 to the present day and looking forward to the implications for the future. It will be illustrated by applications where standards have had a significant and direct impact on business success.	
	Howard Mason, Corporate Information Standards Manager BAE Systems, UK	
09.30-10.00	An IT view on the Future PLM Platform – positioning PLM as a strategic enterprise business initiative	
	As PLM expands from a system primarily supporting mechanical engineers, PLM transforms itself from a system to a platform. This future PLM platform is about integration, collaboration and connectivity of devices, across disciplines and enterprise borders. It is about re-using data, making data easy to access and use with any device, still delivering security and IPR protection.	
	This presentation will elaborate on the role that IT infrastructure suppliers will have in shaping the future PLM platform and how PLM will benefit from the general IT trends.	
	Francois Richard, Industry Director, Automotive and Discrete EMEA Microsoft, France	
10.00-10.30	Break in the exhibition area	

	Systems Engineering	Data exchange	Circular Economy
		and sharing	
10.30-11.00	Nuclear Knowledge Management using Configuration Management and Systems Engineering  Every technical enterprise wants to get more out of their knowledge inventory to improve business and to reduce losses through personnel attrition and retirement. But sources of this knowledge are difficult to identify, capture, assess and re-use. Using examples from nuclear power industry, this presentation will discuss the application of CM and SE to increase personnel awareness and incentives for knowledge sharing. It will discuss the use of field entry and POS technologies, process-based systems, along with the appropriate PLCS-based data taxonomy, architecture and schemas to maximize knowledge capture.  Kent R. Freeland, Project Manager and Fellow of the Nuclear Knowledge Management Institute in Vienna	Standards based data collaboration between French Army and suppliers – the roll out of the PENCIL system  The PENCIL project was presented at PDT Europe 2012. At that stage it was very early but since then major progress has been made.  PENCIL will establish a new way to share logistics data between French Army and Industry based on PLCS/STANAG 4661 and go live is summer 2014.  The presentation will give current status of the project, benefits expected and realized and possible next steps.  Sebastien Olivier, ILS Advisor DGA, France  Michel Perez, Commandant SIMMT, France	Design principles for multiple lifecycles to enable the Circular Economy  This session will present work related to the FP7 Rescom project where Design Principles are one of four pillars. The basis is the work performed at TU Delft.  Participants from industries like aerospace and automotive are welcome to give feedback based on own experience.  Conny Bakker, Design for Sustainability (DfS) program The Faculty of Industrial Design EngineeringTU Delft, The Netherlands
11.00-	Mossec: An initiative for sharing Modelling and Simulation information  Mossec is a new initiative aimed at enabling the sharing, traceability and re-use of modelling and simulation information throughout the product lifecycle and across enterprises. Supported by ASD SSG it targets aerospace but also automotive etc.  The Mossec project will bring together the works done in CRESCENDO to apply AP239/PLCS for this scope, and similar works in Europe and US.  This presentation will describe the background and context for the work, provide the current status and plans, and show examples of the Mossec in use.  Adrian Murton, Airbus, UK	Semantically-Enabled Product Data Management  Robust product data is needed for decision support across the extended enterprise in which governments and companies operate. Authoritative product data relevant to life cycle management often resides across an array of back end and point of use transactional systems.  Semantically enabling access to PLM data from authoritative sources leverages the universal accessibility and security protocols of the internet, while enabling access to current, trusted information.  This presentation will provide details on the capabilities enabled by combining PLCS data management with semantic web technologies, and ongoing projects in this area.  Xenia Fiorentini, Business Development Manager Engisis, Italy  Joel Battistoni, Chief Business Manager Nexus Life Cycle Management, LLC, USA	Materials Information Lifecycle meets Product Lifecycle – A key component of the ResCoM Platform  The materials used in products have a fundamental role in determining the potential to re-use, remanufacture or support multiple lifecycles. Materials, however – or more specifically the substances used in their manufacture – are also increasingly subject to legislations such as REACH, which define the growing list deemed hazardous to health and the environment.  This presentation will consider the role of materials information management in the ResCoM software platform – and in the broader PLM Platform picture. What systematic tools can assist product designers in achieving optimal product performance, while simultaneously minimizing the risk of obsolescence due to legislation, and maximizing the potential for re-use?  Dr Arthur Fairfull, Product Director—Materials Strategy &

#### 11.30-12.00 An ontology for Systems Engineering

The presentation presents an ontology for Systems Engineering and a validated implementation method of this ontology based on RDF Named Graph. The ontology is defined by means of a set of information models derived from ISO 15288.

During the engineering phase of several major capital facility projects, the presented methodology has shown to be very flexible and much more readable, understandable by human and helpful in the communication between engineers than the ISO 15926-2 data model.

L.C. (Leo) van Ruijven Manager technical development, Croon The Netherlands

## Defence industry using e-standards in a pragmatic way to strengthen relations with governments and suppliers

In any large company it is hard to see the way forward when it comes to adopting enterprise level standards such as PLCS. For Saab AB, Business Area Support and Services, adoption is challenging when supporting complex systems with long life-cycles, used by Armed Forces and supplied by either Saab or another OEMs.

This presentation will give some examples on how to get started with PLCS on a smaller scale in a way which can add value in the supply chain and to the end user.

Laurence Earl, Head of Strategy and Business Development Saab AB, Business Area Support and Services, Sweden

# Designing the ResCoM system – shaping the PLM Platform of the Future

Consumer products are typically designed in a framework related to linear economy with short life cycles and resulting in end of life landfill and waste of resources.

As part of the ResCoM EU FP7 project a PLM platform is designed that will promote collaboration, systems engineering and multiple life cycles thinking.

This session will give an update of the technical work one year into the project.

Asif Farazee, Royal Institute of Technology KTH, Sweden

Torbjörn Holm, Senior Consultant Eurostep, Sweden

12.00-13.30	Lunch
13.30-14.00	The Future Platform of PLM - using the PLCS standard to solve ERP integration
	This presentation will review a recent successful demonstration of logistics IT interoperability, based upon PLCS, used to improve Naval Logistics Interoperability during Marine Expeditionary Unit (MEU) operations. The proof of concept was demonstrated as part of US Marine Corps' annual Expeditionary Logistics Wargame Series. The objective was to demonstrate a seamless interface between GCSS-MC (USMC ERP) and the Navy supply systems of record used aboard ship/and ashore to support deployed Naval units (dissimilar ERPs).
	The technology used in the proof of concept was assessed to establish its ability to provide the information technology foundation for logistics integration across the Marine Air Ground Task Force, Joint, and Coalition spectrums. Currently, the Deputy Commandant of Installation & Logistics and USN OPNAV N4 are collaborating to sponsor the transition of this capability from a test environment to a production environment.
	Bill Black, Principal/CFO Troika Solutions, LLC, USA
14.00-14.30	Master Data Management: A Manufacturing Solution or Sinkhole? It Depends on Your Planning!
	As Manufacturing IT evolves from islands of automation, IT strategists struggle to implement a more integral IT architecture. This presentation addresses the pivotal role that master data management will play and how IT organizations will most likely succeed with it.  Key Issues:
	<ul><li>1.Why will Master Data Management (MDM) play a more pivotal role in the manufacturing IT landscape?</li><li>2. What are the tradeoffs across the most likely technical choices to enable MDM for manufacturers?</li><li>3. What are manufacturers' top priorities to maximize chances of successful MDM implementation?</li></ul>
	Marc Halpern, Vice President, Research, Manufacturing Advisory Services
	Gartner, USA

14.30-15.00	The PLM Platform of the future for people from the future	
	The coverage and reach of PLM is changing from mainly the automotive and aerospace industry towards potential all industries. We are moving from often linear processes to more and more iterative, circular processes, where people have to think and work in a multi-dimensional context.	
	What are the requirements for the future PLM platforms to attract and empower the future generations? From historical observations related to the old work force and PLM we will look into the needs and possibilities for the future.	
	Jos Voskuil, Business Consultant PLM	
	TacIT, The Netherlands	
15.00-15.30	The opportunity of the circular economy	
	A call to the PLM community to accelerate the transition to the circular economy. Addressing the opportunities and challenges of a new economic reality, where information and PLM will play a key enabling role in design and business models of the future.	
	Ella Jamsin, Research Manager for Analysis and Insight Ellen MacArthur Foundation, UK	
15.30-15.45	Summary – closing the conference	







## Venue and location

Conference venue is Microsoft Issy les Moulineaux , Paris, France. October 14-15 2014.

# Who will attend PDT Europe 2014

PDT Europe brings focus on user needs. Participants are typically managers and decision makers, program- and project managers, architects, technical leaders and technical specialists from different industries who meet up and exchange ideas.

We expect to attract 150 delegates from Aerospace, Automotive, Building and Construction, Defence, HighTech, IT/PLM, Telecom, Shipbuilding, Energy, Pharmaceutical, Process & Plant and Manufacturing as well as from Research and Academia!

# Conference Fees

Business delegate 995 EUR
Academic delegate 295 EUR
PDT Dinner evening Oct 14 60 EUR

To register www.pdteurope.com

## If you have any questions about PDT Europe, please contact:

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