DDT Europe 2013

### Conference program | October 15 - 16 2013 Nordic Light Hotel | Stockholm, Sweden





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



Key note speakers for PDT Europe 2013

Anders Romare, Vice President, Engineering solutions - Airbus

Peter Bilello, President - CIMdata, Inc

**Dr. Marc Halpern**, VP Research - Gartner

**Prof. Martin Eigner** - Technical University of Kaiserslautern

Organizer:

• eurostep-CIMdata

Co-organizer:

### Welcome to PDT Europe 2013

#### Theme 2013: Integrating PLM, CM and SE for lean, innovative and agile operations

Product Lifecycle Management (PLM), Configuration Management (CM) and Systems Engineering (SE) as high level disciplines have a lot in common. Yet in many organizations the related processes are conducted by different and often separated teams. Leading organizations are now looking into the integration of PLM, SE and CM with the vision to also include the extended enterprise with suppliers, partners and customers.

PDT Europe 2013 will look into state of the art integrated engineering environments in industries such as aerospace and defence, automotive, high tech, energy and building construction. The capabilities of standards such as STEP, PLCS and AP233 will be explored as enablers for change and business benefits will be presented, including lessons learned. Cases will be presented that in many ways challenge the current practice of large scale and monolithic systems to support engineering across a product's lifecycle. The heterogeneous engineering world must move towards connectivity with the value of product data driving decisions to move to new business processes and business models.

#### We look forward to seeing you in Stockholm, Sweden!

Håkan Kårdén, Eurostep, Sweden Frederic Feru, Airbus, France Peter Bilello, CIMdata, USA Nigel Shaw, Eurostep, UK Sune Horkeby, Siemens Industrial Turbomachinery, Sweden

Kent Freeland, Nuclear Energy and Information Technology Consultant, USA

Programme committee for PDT Europe 2013.

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# Agenda PDT Europe 2013 | Day 1 - October 15

Pre-confere	Pre-conference sessions				
08.30-09.00	Registration for PDT Europe 2013 open				
09.00-09.45	The Business Case for PLM	Enterprise parts of STEP: PLCS STEP AP239 and STEP AP233 Systems Engineering			
	This session will discuss in general why PLM is needed and when. What is PLM adding to PDM?  Can PLM be justified by an ROI or is it "strategic"?  CIMdata is a global leader in PLM with services in consulting and training in PLM. Join this session to	A similar session has been held during recent PDT conferences and it has always been highly appreciated. This year the session will look at the standards from the viewpoint of an integrated approach to PLM-CM-SE			
	get the knowledge needed to answer "why PLM?"  CIMdata	Phil Spiby, Principal Consultant Eurostep			
09.45-10.30	Introduction to the concepts behind PLM, CM and SE – who has been using what	A glance into the upcoming ISO 8000-8 standard "Data and Information Quality"			
	The discussion about how these areas are interrelated has been going on for many years. As Peter Bilello will present in one of the key notes a convergence is underway and it is important to understand the drivers for this.	We are more dependent on information than ever and the volume is growing at a rate that is hard to understan even for experts in the field. Knowing the quality of information is the backbone of Infor-mation Management.			
	This session is about the background, why do we have terms like PLM, CM and SE at all? What are the definitions and where is the usage today? This session is a good primer for much that will be discussed over the next two days at PDT Europe 2013.	But what is data and information quality and can this be measured? This presentation will reflect the content of the upcoming ISO 8000 Part 8 ": Information and Data Quality – Concepts and Measuring" and ISO 8000 Part 9 "Information and Data Quality – Relationship to other Standards".			
	CIMdata	Trine Hansen , Information Risk Management Det Norske Veritas			
10.30-10.45	Registration for PDT Europe 2013 open				
10.45-11.00	Opening of PDT Europe 2013				
	Welcome by the Organizers - Introduction of exhibitors				
11.00-11.45	What the Future Holds the convergence of PLM, CM and SE is underway and the impact will be significant!				
	The growing complexity of products across a broad range of industries has created a need for the convergence of Configuration Management practices and processes, Product Lifecycle Management capabilities and associated mindset, and Systems Engineering practices and mindset to truly understand product behavior and manage the complexity of what and who defines it. This presentation will describe the major driving forces behind this convergence, and why companies of all shapes and sizes need to be ready.				
	Peter Bilello, President CIMdata				
11.45-13.15					
		Lunch			
13.15-13.45	The aerospace industry and PLM, CM and SE				
	An Airbus view of the evolution and integration of Product Lifecycle Management capabilities and System Engineering practices to meet the new industrial model as an "Integrator & Architect" which brings a need of an integrated extended enterprise capable of working together in real-time with 3D information.				
	Anders Romare, Vice President Engineering solutions - Airbus				
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13.45-14.15	Automotive industry in search for new ways to communicate product data  The automotive industry has for many years been using computer to computer messages for e-commerce purposes, such as sending orders to warehouses or tracking their progress. Along with EDI, Supplier Portals have been in use that enable collaboration with business partners by providing customized, partner-specific access to OEMs' content, services, applications and tools.		
	Recent development with collaboration on platforms and systems, for instance in joint ventures, has identified shortcomings with the existing communication models. There is a need for data sharing where collaboration is viewed as a core capability. This presentation will look at data sharing for the automotive industry, outlining the benefits as well as identifying the obstacles for effective collaboration.		
	Per Brorson, Operations Director		
14.15-15.00	A defence contract calling out for an integrated approach to manage product from requirements to the in service-phase		
	In 2012 the Norwegian Defence contracted BAE Systems to deliver new as well as upgraded combat vehicles with an order value of 750 MUSD. The contract is unique in that is calls out a close cooperation from the earliest phases all the way into deployment and in-service using standards for product data.		
	This presentation will describe the intentions behind the contract for information management and review the current state of the project.		
	Tor-Arne Irgens, Commander Senior Grade NDLO		
15.00-15.30	Break in the exhibition area		
15.30-16.00	The convergence of PLM and SE – will this decrease or increase the risk with PLM projects?		
	In presentations over the last couple of years Prof Martin Eigner has presented on the topic of failed PLM projects. This time the presentation will look at risk and rewards with an integrated approach encompassing PLM, SE and CM based on model based systems engineering. What should industries do and what is the role for academia?		
	Prof Martin Eigner Technical University of Kaiserslautern		
16.00-16.30	Talking PLM in the Board Room		
	Investments in PLM systems are typically much harder to sell than an ERP investment. Yet good PLM execution is fundamental to business success. For example, recent development with a more systems engineering approach where cost is a design criteria might change this if the benefits are explained in financial terms. This presentation elaborates on enhanced PLM business value and how it should be explained to business leaders.		
	Marc Halpern, Vice President, Research Manufacturing Advisory Services Gartner		
16.30-17.00	Panel discussion with speakers day 1		
17.00-18.30	Socializing - Welcome Reception in exhibition area		
19.00	Socializing – Dinner buffét at Stockholm City Hall		
	5-10 minutes walk from Conference venue  Limited numbers of tickets available. Must be pre-booked, see on-line registration.  (Free of charge for all delegates).		

# Agenda PDT Europe 2013 | Day 2 — October 16

08.15-08.30	Opening of Day 2		
	Standards supporting PLM, CM and SE, examples from today and looking ahead		
08.30-09.00	Configuration Management of Product Life Cycle Information to address requirements from customers		
	Kongsberg Protech Systems has identified the need to add a layer of Configuration Management going beyond traditional PLM to include also products manufactured and in service. PLCS has enabled this and the presentation will describe efforts undertaken to implement a solution, how such a solution can be used to better serve customers, business benefits and lessons learned.		
	Odd Ivar Hatlenes, Department Manager Integrated Logistics Support KONGSBERG		
09.00-09.30	What Has Gone Wrong? Linking Health Monitoring to Support		
	Integrated Vehicle Health Monitoring (IVHM) takes real-time data from on-vehicle sensors in order to identify where something has failed or may soon need attention. Support systems schedule maintenance and repair against support opportunities, which, for ships, may be months apart. There is a need to link the IVHM system into the Support System in order to schedule the right maintenance tasks. This is discussed in terms of MIMO-SA-CBM (Condition-based Monitoring), a key information standard for IVHM, and PLCS, the information standard for support. The challenge is to keep the MIMOSA sensor networks aligned with the platform configuration, as maintenance tasks often involve replacing parts, therefore changing the identity of what the sensors are reporting on.		
	Sean Barker FBCS, C.Eng, Principal Scientist Advanced Technology Centre BAE SYSTEMS		
09.30-10.00	Innovating the future with circular business models for sustainable manufacturing systems		
	The EC working paper "Roadmap to a Resource Efficient Europe" published in 2011 outlines resource conservation and resource management in the lifecycle perspective as vital for our future. For our industrial systems this would mean a shift from linear to circular business models. One approach to such business models is that companies will move towards selling services rather than products. In order to ensure efficient services, the companies will require a high level of visibility of their products during the entire life cycle. This requirement will force the three areas of technology PLM, CM and SE to come closer.		
	This presentation will outline the concept of an analysis and decision making platform that should help companies in ensuring the sustainability of their businesses with resource conservation built into the business objectives.		
	Amir Rashid, Assistant Professor Department of Production Engineering Royal Institute of Technology KTH		
10.00-10.30	Break in the exhibition area		

### Parallel tracks

	Implementations	Vendor and standards	Think tank
		support	PLM-CM-SE
10.30-11.00	The importance of closed loop CM to increase the value of Modeling and Simulation  The importance of modeling and simulation (M&S) is growing. Business decisions are to an increasing extent based on the virtual product.  Despite promises to deliver significant contribution to the business bottom line and as an enabler to drastically cut lead time and increase quality M&S is not mainstream as ERP and PLM.  This presentation will discuss how Siemens Industrial Turbomachinery in Finspång is moving into increased use of M&S. It will outline some of the efforts in the fundamental change, expected business benefits as well as hurdles to overcome.  Per de Flon,  IT Developer and Project Manager Sune Horkeby,  Product Regulation and Standardization  Siemens  Industrial Turbomachinery	Supporting 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 Software lifecycle (ALM), PLM and wider engineering disciplines. It will cover recent experience of the application of new technologies such as Open Services for Lifecycle Collaboration (OSLC), hosted within OASIS.  Gray Bachelor, Rational Development, CTO Office IBM Software Group	Perspectives on PLM, CM and SE. Do we see a convergence and what would be the pros and cons?  This block will see 3 presentations each 20 minutes long. It will be a mix of industry presentations and R&D efforts. The last 30 minutes will be an open discussion with the 3 speakers in a panel.  10.30-10.50  Implementing PLM-based Workflow for Configuration Management (CM) and Nuclear Knowledge Management (NKM) in the Nuclear Power Industry  Nuclear Power has only started to embrace the concept of PLM as part of the implementation for a CM program. This session will describe the theory and application of PLM methods to achieve better CM at Nuclear Power Plants (NPP's), then integrating Knowledge Management into the PLM infrastructure to "fill in" the latent information and data so often lost.  Kent Freeland, Consultant WorleyParsons Engineers and Constructors  Prof. Dr. Yanko Yanev, NKMI (Nuclear Knowledge Management Institute)

11.00-11.30

## The PLCS standard and its adoption at FMV

Swedish Defence Material Administration (FMV) has been involved in the development of PLCS since early days, being one of the sponsors of PLCS, Inc.

This presentation will outline the status of PLCS work at FMV, its international

Engagement and some of the ongoing work. It builds on the presentation at PDT Europe 2012 with updates on the MIMER project and how PLCS fits in the picture of the PRIO project at FM (Swedish Armed Forces). The exchange and sharing of data with industry will also be covered.

Mats Elg and Mats Nilsson Logistics Support Swedish Defence Material Administration

## Unifying the product definition platform

As products become more complex, especially with increasing software and electrical content, there is a growing need for product conception, design and development to be based on a unifying system-level representation, which captures requirements and makes them visible and traceable through the product lifecycle. This need can only be addressed if the disciplines of CM and SE are based on the same underlying product definition platform.

This presentation will discuss how PLM systems are evolving to deliver reliability and integrity of information for product lifecycle functions enabling better decision support. Openess and compliance with standards such as STEP and PLCS will be covered.

Henk Broeze Senior Systems Engineer CSEP Siemens PLM Software 10.50-11.10

## A Theoretical Foundation for Integrating PLM, CM and SE

In this presentation, the Activity Domain Theory (ADT) will be proposed as a conceptual foundation for integration. It will be discussed how the ADT way of framing integration may be utilized in practice. As an example, I will take the integration of a PLM system with an ERP-system from the Ericsson telecom world. I will also make an inquiry into PLM, SE and CM from the ADT perspective, and point to some issues that need to be considered when discussing integration in relation to these areas.

Lars Taxén Linköping University

11.30-12.00

#### Data Is the Currency of SOA

This presentation emphasizes that Service Oriented Architecture (SOA) demands standardizing data structures for communications among systems. As the influence of SOA and the use of services that can be extended into cloud based solutions grows, the next technological hurtle to jump over is utilizing data that have common, wellunderstood and standardized meanings. Data standardization lowers the cost of services, both during deployment and throughout their life cycle. An ideal approach to achieving this goal is creating and deploying canonical formats for business objects exchanged. The presentation will give some experiences, details, and alternative criteria for this task using a practical approach.

Jim Illback Associate Technical Fellow Boeing

### Dassault Systèmes and support for openness

In this workshop, Thierry Charron, Senior Director, Dassault Systemes (3DS) Research and Development, will offer a detailed presentation on 3DS' support openness as part of DS' commitment to interoperability standards and the Codex of PLM Openness (CPO) initiative. Charron will also provide an update on the STEP ISO standard in DS solutions including STEPAP242 - a standard that addresses data exchange, archiving and visualization components. Additionally, Bernard Vermersch, Global Enterprise Architecture Expert, DS, will discuss the role V6 has in delivering an open 3DEX-PERIENCE business platform by addressing all dimensions of systems integration including applications extensions, CAx intergration with enterprise systems, and market standards compliance. Through this workshop, you can discover the technologies and services available to support the 3DS commitment to openness.

Bernard Vermersch Global Enterprise Architecture Dassault Systèmes 11.10-11.30

# Learning from CM to be innovative in product data management

A foundation of the new product data management approach will be presented. It is based on the possibilities with aggregation laws based on correlating semantic context information based on the product change. This would answer to problems with divisions of work for large complex systems. A new understanding, able to connect apparently disparate bits of the definition resulting from product change activities, could keep a more consistent, versatile and intrinsic foundation of the developed product. We are talking about being able to learn from the product change, adaptation and evolution.

Moises Martinez-Ablanedo CM Expert Airbus

11.30-12.00

Panel and discussion Moderator Phil Spiby Eurostep

12.00-13.30	Lunch BIG		
	Implementation, Country and Integration		
13.30-14.00	BIG Implementation: Using PLCS to close the divide between Military operations and Systems Life Cycle Management		
	In the military establishment, a program office is responsible for acquiring weapon systems and other durable equipment, developing and implementing a plan for its support over time, and overseeing the many aspects of systems engineering. There is also the fleet that helps shape the system requirements, employs the equipment in operations and training, and performs a defined level of maintenance. Lastly, there is the industrial complex that performs heavy maintenance, affects major upgrades, and provides spare and repair parts. All of these actors are required to perform these roles over the life of each program and each of these actors contributes to and consumes life cycle data using their processes, information systems and standards.		
	Using PLCS as a core, we have demonstrated the ability to close the divides between organizations and information systems, enabling operational and corporate activities to capitalize upon each other's resources. Our efforts have created a model for joint and coalition logistics operations, and can provide valuable feedback from operational usage to sustainment efforts, systems engineering and systems life cycle management.		
	Col Bill Black (Retired), Black&Rossi, affiliated with Nexus Life Cycle Management LLC		
14.00-14.30	BIG Country: China and status of PLM		
	The rapid development in China is well known to all. What is not that visible is the maturity of the use of PLM, CM and SE. Complex products and systems are designed and manufactured in China but are the engineering processes what we are used to in Europe and US? Do the engineers have other needs and requirements because of younger workforce and less legacy?		
	This presentation will provide some insight to these questions. It should also trigger some thoughts how industry and PLM software vendors could approach China based on the advanced capabilities in modern PLM and Systems Engineering.		
	Wei-Shan Chiang, Vice President 安世亚太科技股份有限公司(Pera Corporation Ltd.)		
14.30-15.00	BIG integration. CM and SE calling for improved integration PLM, ERP and more		
	Traditionally CM has been a process supporting systems like domains like mechanical design, installed base, software development etc. With increasing need for integration across disciplines and across organizations CM has to change towards a more integrated approach including closed loop. With such a development CM will support new business models and serve as a support for the business.		
	This presentation will discuss capabilities with recent development in Information Technology and Business models that have the potential of significantly improving the CM process. The presentation will seek to identify opportunities and pitfalls with concepts like Systems Engineering, Virtual Product, Data Sharing, Extended/Virtual Enterprise and Performance Based Contracts from a CM point of view.		
	Torbjörn Holm, Senior Consultant Eurostep		
15.00-15.10	Summary – closing the conference		

#### Venue, Location and Hotel

The PDT conference will take place in: Stockholm, Sweden. October 15-16 2013.

Conference venue is Nordic Light Hotel.

Hotel rooms are pre-booked with a special conference price at your convenience at the Nordic Light Hotel.

#### Who will attend PDT Europe 2013?

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 major engineering business sectors of Aerospace, Automotive, Building and Construction, Defence, HighTech, Telecom, Ship Building, Power Generation, Pharmaceutical, Process & Plant and Manufacturing as well as from Research and Academia!

#### Conference Fees

Business delegate 995 EUR
Academic delegate 295 EUR
Buffet dinner reception evening Oct 15 Free of charge

To register www.pdteurope.com

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### Buffet dinner at Stockholm City Hall October 15

The City of Stockholm is pleased to host a buffet dinner reception at the Stockholm City Hall for the participants PDT Europe 2013. The City Hall, with its imposing facades and interior in National Romantic style, is one of the best known buildings in Sweden. It is famous not least for the annual Nobel Prize banquet.

Limited numbers of tickets available. Must be pre-booked before Oct 3. See on-line registration at www.pdteurope.com



Hosted by the City of Stockholm

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

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