# PDT EUROPE 2011

## The major European event within Product Data Technology



PDT Europe 2011 is about the strategic importance of PLM standards for organizations, regions and industries, thus at a very strategic and high level. It will also deliver practical advice at detailed level.

To "collaborate to compete" requires a top-down and a bottomup approach. It is not any more about a specific company, it is also important for industries as well as for regions.

PDT Europe offers two days of great presentations and meetings!

	B		
<b>Peter Bilello</b> President CIMdata USA	<b>Dr Marc Halpern</b> Vice President Gartner Group USA	<b>Kari Penttinen</b> Senior Technology Adviser, Tekes Finland	Torbjörn Holm Project Planning Committee of ISO TC184 SC4 (STEP) and Eurostep Sweden

**Organizers:** 









Vaasa, Finland 20-21 September 2011



## Theme 2011:

# Collaborate to Compete – using PLM standards to architect the extended and virtual enterprise.

Today's business organizations have to operate as part of multiple business networks. Supply Chains are becoming Supply Networks and involving design, risk sharing and support through life as well as manufacture and delivery. Operating within such networks requires agility - hard wiring businesses together is very costly in the long run. PLM standards are a key enabler for architectures that are the foundation of agile business.

No single PLM or ERP vendor is able to deliver all IS/IT to an industry - even if some may claim they can. The agile business model lets an organization use best of breed business processes and IT systems. Such companies can shift focus between products and services and it can operate with different business models in different geographic regions and business areas.

The selection of partners and joint ventures is entirely based on business opportu-nities where IS/IT is an opportunity and not a risk. Mergers and acquisitions as well as spin-off activities are simplified. PDT Europe 2011 will look into some success stories enabled by PLM standards. It will also examine what is needed to become a "best partner".

PDT Europe 2011 is about the strategic importance of PLM standards for organizations, industries and regions, thus is relevant at a very strategic and high level. It will also deliver practical advice at the detailed level.

To "collaborate to compete" requires both a top-down and a bottom-up approach. No longer just relevant to specific company needs,

PDT is important for industries as well as for regions.

**Sponsors:** 

-eurostep-



PDT EUROPE 2011 I VAASA, FINLAND I SEPTEMBER 20-21 Collaborate to Compete – using PLM standards to architect the extended and virtual enterprise

### Agenda- PDT Europe 2011

Day 1 – September 20

08.30	Registration for PDT Europe open		
Pre-c	onference sessions		
09.00	<b>STEP and PLCS Implementations</b> User experience – a summary of the workshop from September 19.		
10.00	Break in the Exhibition area		
10.30	Introduction to Enterprise parts of STEP PLCS STEP AP239 and STEP AP233 Systems Engineering – and more This presentation will initially take us back to the parts of STEP first released in 1995. It will bring us up to date with the recent developments, especially PLCS (STEP AP239) and STEP AP233. While PLCS covers information across the product's life cycle - from requirements to product support - AP233 adds the ability to define an engineering database in support of an integrated development process. The standards are already in use for data exchange as well as data sharing. This presentation will cover what is inside the standards and scenarios/cases how		
	the standards are used. It will briefly touch upon some software and libraries available for implementers. Recent developments such as the use of OMG SysML™ to define PLCS DEXs will be included. <i>Nigel Shaw, Rob Bodington</i> <i>Eurostep</i>		
11.20	The business case for standards based PLM – and what do we mean?		
	As the interest for STEP and PLCS is increasing one of the most common questions asked is – is it used and is so where, how and why? Torbjörn Holm from Eurostep will during 20 minutes give a summary of the situation and where PLM standards should be used.		
	This will then be followed by a 20 minutes open discussion.		
	Torbjörn Holm, Eurostep. Mr Holm has more than 30 years experience from specifications and implementations of standards based product models and PLM. He is a member of the Project Planning Committee of ISO TC184 SC4 (STEP). He is one of the founders of Eurostep.		
12.00	Lunch		
13.15	Opening of PDT Europe 2011 Welcome by the Organizers Introduction of exhibitors		

PDT 2	PDT 2011 Key note presentations			
13.30	Can a country/region use PLM and PLM standards to increase its competitiveness and at the same time position itself as best partner?			
	Digital Product Process DPP program in Finland. Background and some result from the Tekes funded activity.			
	The Digital Product Process programme boosts the competitiveness of companies with better use of information technology in product processes. The goal of the program is to develop further the customer oriented product based business and increase the productivity of company networks designing and delivering products, systems and services to global markets by means of using advanced IT-systems and practices. The programme is driven by Tekes – the Finnish Funding Agency for Technology and Innovation. Tekes is the main public funding organisation for research, development and innovation in Finland.			
	Kari Penttinen, Senior Technology Adviser, Tekes. Kari Penttinen is working in the area of Products, Production Systems and Manufacturing Technologies mainly for Mechanical Engineering Industry. He is the program manager of the Digital Product Process program, initiated by Tekes in 2008. Before joining Tekes he worked as Engineering manager in manufacturing industry and has been in charge of implementation of global CAD and PDM solutions.			
14.00	Product Data Standards Enhancing Life Cycle Traceability of Defense Articles			
	Precision in item identification and data exchange are the primary tenets to resolve current problems facing NATO and U.S. DoD in accountability, traceability, fleet management, and anti-counterfeiting. These issues are common to defense organizations due to the fluid nature of the operating environment, and the diversity of suppliers, logistics providers, and coalitions that encompass their enterprises.			
	The ability to relate historical data about each item during events that affect its remaining life, custodian, value, and configuration are valuable, provided the proper context is available. Due to the complexity of the extended operating enterprise, important attributes need to be collected by a wide range of information systems, and be discoverable and usable in decision support – for tactical, administrative, and strategic decisions.			
	This presentation will describe a vision and current plans for leveraging Unique Identification UID), Codification, and PLCS to achieve this end.			
	Mr. Rob Leibrandt, U.S. Office of the Under Secretary of Defense for Procurement and Acquisition Policy (DPAP) and Chairman of NATO Allied Committee 327, Working Group 5 Unique Identification (UID) of Items			
14.45	Break in the Exhibition area			

The a	nalysts view
15.15	PLM: Bringing the Extended Enterprise Together to Enable Green Can PLM and its ability to enable a collaborative environment really play a factor in a product's total greenness? Can an enterprise ever really maximize the greenness of their products without a holistic PLM approach—an approach that encompasses all extended enterprise participants throughout the lifecycle? Can enterprises innovate without considering the growing complexity and ever-evolving green requirements? Can PLM's support of reduce, reuse, recycle, and repurpose of an extended enterprise's intellectual assets ever be a force in the support of green? These and other thought provoking questions will be discussed during this session. <i>Peter Bilello</i> <i>Mr. Bilello has more than 22 years of experience in the development of information technology</i> <i>solutions for research, engineering, and manufacturing organizations worldwide. He has held</i> <i>various positions in Product Lifecycle Management strategic direction, analysis, selection, and</i> <i>implementation, CAD/CAM/CAE/CIM implementation, synchronous and lean manufacturing</i>
16.00	consulting, and software engineering. Navigating the Landscape of Potentially Disruptive Manufacturing IT Trends This presentation analyzes the impact of the top 10 emerging Information Technologies as identified by Gartner in terms of risks and opportunities for manufacturers. We will provide opinions on the relevance of these technologies and the timelines for manufacturers to adopt them. Software as an integral part of manufactured products, delivering a growing percentage if a product's differentiated value, has particular focus. We will explore the impact of these trends on best practices for developing and supporting products, managing supply chains, and the implications for ongoing standards development.
	Dr. Marc Halpern Marc Halpern, P.E., Ph.D., is a research vice president in Gartner, Inc. where he is a lead analyst covering product life cycle management strategies and software applications for manufacturers. He focuses on design, engineering, product data management, manufacturing process planning and product portfolio management. In addition to studying and analysis technology and business trends, he works regularly with leading manufacturers on strategies and best practices for application architecture, software selection, implementation, and use of Information Technology for design, engineering, and related product lifecycle management activities.
16.45	Panel discussion and end of day 1.
17.15 - 18.00	Drinks and snacks in exhibition area
19.30	Socializing - PDT Dinner

#### Agenda- PDT Europe 2011

Day 2 – September 21

_ay /	2 – September 21		
08.30	Opening of day 2		
08.45	Keys to Successful Collaboration         Global competition for market share and shareholder value demands enterprises worldwide to be successful at all levels and all stages of their product lifecycle. This starts at the early conception of product ideas and making decisions on what ideas have the highest probability for market success, through smooth, seamless, and sustainable product development, production, and maintenance/support, all the way through product obsolescence and environmental friendly disposal. To be successful through all these phases, a company needs to satisfy many requirements. Visionary requirements, managerial, standardized processes, standard products and parts, excellent collaboration, communication, and data integration throughout the value chain, and many others. In this presentation key collaboration requirements and how to meet them will be discussed.         Peter Bilello, CIMdata         Mr. Bilello has more than 22 years of experience in the development of information technology solutions for research, engineering, and manufacturing organizations worldwide. He has held various positions in Product Lifecycle Management strategic direction, analysis, selection, and implementation, CAD/CAM/CAE/CIM implementation, synchronous and lean manufacturing consulting, and software engineering.		
09.15	Break in the Exhibition area		
	User experience – from architecture to business benefits	The view of vendors and service suppliers	Research – status toda and future work
)9.45	Mass customized knowledge management as a pillar of success An approach for structural knowledge management is presented. Survival of a business requires companies to adapt to rapidly changing market conditions. The management of the extended business network is key. A network based upon a product information model is used to produce and develop the business processes supporting customer oriented product variants. <i>Mikko Jokela</i> <i>Project Manager, PDM</i> <i>ABB Oy</i> <i>Finland</i>	Semistructured integration between Engineering and Manufacturing structures Today the transfer of product information between engineering and manufacturing is something most manufacturing companies have issues with. The two most used methods to handle the transfer today are: 1) Handling the R&D Engineering) BOM and Manufacturing BOM as seperate unintegrated structures, 2) The use of one comprehensive product structure that covers the need from both engineering and manufacturing. This presentation will present a third method, the theoretical approach, the software implementation of it and describe how it is used by companies. <i>Johan Malmström</i> <i>PLM Solution Principal</i> <i>SAP EMEA</i> <i>Sweden</i>	The PLM related research by Finnish Metals and Engineerin Competence Cluster, FIMECC The aim of FIMECC Ltd. is to increase and deepen the cooperation between companies universities and research institut in the area of top quality research FIMECC Ltd. manages research the area of five strategic research the area of five strategic research that address specific issues and research questions mentioned in Strategic Research Agendall <i>Ms. Katri Valkokari</i> <i>Fimecc</i> <i>Finland</i> Antti Pulkkinen /Tampere Univer of Technology <i>Finland</i>

10.15	Collaborate to compete – make Business to Business understandable	Optimizing communication and documentation processes with 3D PDF	Capturing the flows of the product process
	Business today operates on best practices and has streamlined processes. The transactions are document based and the documents have a lot of information hidden in this effective business operation. But is this sufficient to meet require- ments for shorter delivery time? Do we have capabilities for collabora- tion? This presentation will describe what is needed for the next level of business support – to make product data available to customers, suppli- ers, authorities etc. <i>Göte Carlsson</i> <i>Development manager</i> <i>IM Architect - Information</i> <i>Power Plants PDM</i> <i>Wärtsilä</i> <i>Finland</i>	PDF is a worldwide established standard for documents and stand- ardized in various ISO initiatives (PDF/A, PDF/E, PDF/X, ISO 32000). PDF offers a wide range of function- alities for including engineering data from various systems like ERP, PLM or 3D CAx systems into one single PDF container file to be used as an "intelligent" document. These PDF documents can be integrated into PLM processes. The PDF/E standard has been established for supporting engineering related processes and is supported by the newly formed —3D PDF ConsortiumII. The presentation gives an overview on: 3D PDF capabilities, Status of PDF/E standardisation, The ecosystem around 3D PDF and the new —3D PDF ConsortiumII. <i>Peter Pfalzgraf Director Product Center PDFGEN3D PROSTEP, Germany</i>	The business environment continues its change towards being more dynamic. This presentation will discuss and challenge the traditional view on how to manage information and knowledge. There is research which claims that one should not concentrate on the control of the information but to the creation process of the information. The case of this paper discusses about the creation, definition and control of information in the car industry. The subject of the study is engineering bill of materials (EBOM). The objective of the study has been to determine the EBOM concept so that it would be more clearly to see the actual information elements that it consists of. An agent based system to manage the development flow is discussed. <i>Ilse Becker</i> <i>Valmet Automotive</i> <i>Finland</i>
10.45		Break in the Exhibition area	
11.15	Interoperability Approach for Aerospace Industry: Alenia Aeronautica Experience with the ISO 10303 STEP Standard	Is there "internal and external product data" and what is the difference?	Open Source service framework for ISO 15926 compliant data
	Manufacturing companies of today are under enormous pressure. Products and processes are getting more complex. Products should be delivered to the market faster, with high quality and reliability and with enhanced customer satisfaction. This requires the ability to rapidly create alliances of enterprises and operate in multiple business networks. Interoperability is required between disciplines like operations, procurement, logistic, partners and suppliers. The STEP standard is recognized as a key enabler for enterprise interoperability integrating IT/IS Systems inside and outside the companies, enforcing data exchange scenarios and enabling long-term data archiving. This presentation describes Alenia Aeronautica project experience with the STEP Standard. Daniele Ciriello Consultant of Maneat Competence Center PLM Alenia Aeronautica, Italy	Companies are collaborating more than ever for a range of reasons such as reducing costs, augmenting skills and infrastructure, and sharing risks. While multiple collaboration models have existed for a long time, we see much greater use of these methods and an evolution of the models themselves. These collaboration models force us to re- think our classification of Product Data as purely "Internal" or "External". The paper will discuss how different collaboration models alter the simplistic views of Internal and External Product Data. The paper also discusses how organizations, by analyzing different collaboration models, could address the challenges arising from this during their PLM Implementation. <i>Nagraj Atlur</i> <i>Tata Consultancy Services</i> <i>Germany</i>	There is wide industrial interest in improving the productivity of networked operations all through the life cycle of a process industry facility by taking up ISO 15926. There are a number of different means to do this. The Finland based THTH association has developed the Sefram infrastructure for sharing data in the value network. This presentation gives a practical overview of the background, motivation and most essential features of Sefram, and presents examples of ISO 15926 – based data transfer between different partners. Matti Paljakka VTT Technical Research Centre Finland Timo Syrjänen Pöyry Finland

11.45	Implementing and Standardising Systems Engineering in a Global Corporation Systems Engineering (SE) has become increasingly important in the automotive/transport industry in order to manage the sheer complexity of large scale development projects and secure all emergent properties of a complex system. The main drivers for introducing SE is that the complexity and interconnectedness of systems continues to grow and the shift of focus to the complete offer rather than the product itself. This presentation summarises our experiences from implementing and standardising Systems Engineering practices within Volvo Group. Dr. Fredrik Berglund, Business Consultant - Systems Engineering Volvo Information Technology	Managing the complexity of product information in the value- chain of the extended enterprise Many companies struggle today to define a coherent and practical information architecture for their product related information. The number of system vendors, including but not limited to PLM, ERP and MDM, assume strongly overlapping key roles for their solutions leading to a difficult boundary setting for system roles. The trend to increase outsourcing in R&D, production, service and IT functions is adding a new even more complex dimension. What could be the solution that meets the flexibility needs caused by the increasing rate of change in business models? Sami Isoherranen Director, Manufacturing IT Logica Finland	Selling Technology as a Product Many industries face the problem of costly R&D efforts to keep their competitive advantage. Especially in the aerospace industry R&D calls for large investments connected to large market risk. One possible way of levering this cost for R&D is to exploit the results in areas that are normally outside a company's core business through efficient selling and licensing of knowledge to other companies. A research project at Chalmers is targeting these issues, and reflections and conclusions from this work will be presented, including the results of a web survey performed in April 2011. Daniel Corin-Stig PPD - Product Development Chalmers University of Technology	
12.15		Lunch		
13.30	Demonstrating STEP and PLC	S		
	Feedback from last year's PDT Europe has included comments like: Can we see what this is/how it works?PDT Europe 2011 will include demonstrations covering some important areas in response to the feedbackreceived. The demonstrations will be brief but the intent is that they will capture the essentials in order for allto better understand why STEP and PLCS are important standards.Case 1: DEX data exchangeCase 2: Integrated Supply ChainCase 3:Integrated Systems EngineeringCase 4: Integrated Product Support			
14.30	Panel discussions and end of F	PDT Europe 2011		
15.00-	Company Visits			
17.00	ABB Motors			
	Introduction to ABB motor production facility and presentation of global team working methods (including the used software). ABB offers a comprehensive range of reliable and high efficiency motors and generators for all applications. ABB has what it takes to help every industry and application reach new levels of efficiency and energy savings even under the most demanding conditions. Combining the best available materials with superior technology, the electric motors and generators are designed to operate reliably no matter how challenging the process or application, and to have low life cycle costs.			
	Wärtsilä			
	Introduction to Wärtsilä large engines production facility and presentation of remote, on-line condition based maintenance and manage system for ships and stationary power plants all around the world. You are able to observe how the maintenance software functions.			
	Wärtsilä is a global leader in complete lifecycle power solutions for the marine and energy markets. By emphasizing technological innovation and total efficiency, Wärtsilä maximizes the environmental and economic performance of the vessels and power plants of its customers.			
	Vacon			
	manufacturing is introduced. Vacon the best AC drives in the world – an the production of renewable energy Italy. The company has sales offices	business application suite. The softwa 's operations are driven by a passion to id nothing else. AC drives are used in th . Vacon has R&D and production units s in 27 countries. In 2010, Vacon's reve of 1,301 people around the world. Vac	b develop, manufacture, and sell he control of electric motors and in in Finland, the USA, China, and enues were EUR 338.0 million and	

#### **Venue, Location and Hotel**

The PDT conference will take place in: Vaasa, Finland September 20-21, 2011

Conference venue is University of Vaasa, Wolffintie 34, main entrance

Hotel rooms are pre-booked with a special conference price at your convenience at the Hotel Radisson Blu Royal Hotel in Vaasa



City Hall of Vaasa
Welcome Reception

On September 19, at 18.00 speakers and delegates are invited to a reception and networking opportunity in the City Hall of Vaasa

The reception and networking opportunity at City Hall will be a pleasurable opportunity to make new industry contacts. The networking opportunity is free of charge

The organizer reserves the right to make changes to the program.

We look forward to seeing you in Vaasa, Finland!



#### Who will attend PDT Europe 2011?

PDT Europe is for managers, decision makers, program managers, implementers, developers, project engineers, scientists and all who are involved in developing and implementing PLM. PDT Europe 2011 iis expected to attract 150 delegates from major engineering business sectors of Aerospace, Automotive, Building and Construction, Automotive, Defence, High-tech, Telecom, Ship Building, Power Generation, Pharmaceutical, Process & Plant Engineering and Manufacturing as well as from Research and Academia.

#### **Conference Fees**

Business delegate	995 EUR	
Early Bird registration (last day 31 Aug)	840 EUR	
Academic delegate	295 EUR	
Welcome reception on Monday eveningfree of charge		
PDT dinner on Tuesday evening	45 EUR	

Through our co-operation with Tekes i Finland we can offer discount on the conference fee for delegates from Finland. Please email Project Manager: maria.hardig@eurostep.com

#### Social Events – Welcome Reception and PDT dinner

The PDT Europe social events are intended for all to meet informally for networking and new contacts. All delegates, speakers, partners and guests are welcome.

If you have any questions about PDT Europe, please contact: Maria Härdig e: <u>maria.hardig@eurostep.com</u> p: +46 (0)708-681 766 www.pdteurope.com