DI2.4: PROMISE Dissemination Report

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ABSTRACT:	This deliverable describes the PROMISE dissemination activities of the project period M30 to M36 including the planned activities.

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1 Introduction

In this report the dissemination activities of the PROMISE project will be presented from project month 36 up to PM 42. This also includes publications and presentations for scientific conferences and journals publications, which are foreseen for presentation and publication.

2 Publications and presentations

2.1 Journal papers and conference proceedings

During the considered period members of the consortium prepared about 22 conference papers presented on different conference and 20 journal articles already or to be published.

No	Authors	Title	Forum
1	A. Matta, A. Shaw, L. Rabe, A. Bufardi, P. Folan, B. Moseng	Deriving Specifications for Training Courses in Large Engineering Integrated Projects: A Practical Experience	SEFI-IGIP 2007, Joining forces in engineering: education towards excellence, 1-4 July 2007, Miskolc Hungary; Eds. L. Szentirmai, T. G. Szarka, pp.61-64
2	Anja Klein	Incorporating Quality Aspects in Sensor Data Streams	Proceedings of the ACM first Ph.D. Workshop in CIKM (PIKM), Lisbon, Portugal, 2007
3	Cassina, J., Taisch, M., Potter, D., Parlikad, A. K.	Development of PROMISE architecture and PDKM semantic object model	Submitted to the *14th International Conference on Concurrent Enterprising*, Lisbon, June 2008.
4	Cassina, J., Taisch, M., Zanotto, M., Gerosa M.	Proposal for a methodology for the development of predictive maintenance decision support system based on artificial intelligence	MM 2007, International Conference on Maintenance Management
5	Cassina, J., Tomasella, M., Matta, A., Taisch M., Felicetti, G.	Closed-loop PLM of household appliances: an industrial approach	APMS 2007 of the IFIP Working Group 5.7
6	Cassina, J., Tomasella, M., Matta, A., Taisch M., Terzi, S.	Proposal of a PLM Standard	ICE 2007 International Conference
7	Cassina, J., Tomasella, M., Matta, A., Taisch M., Terzi, S.	Proposal of a PLM Standard for mass products	International Conference on Product Lifecycle Management 2007 Milano Italy. Conference Proceedings ISBN 0-907776-32-9
8	Främling, K., Ala-Risku, T., Kärkkäinen, M., Holmström, J.	Design Patterns for Managing Product Life Cycle Information	Communications of the ACM, Vol. 50, No. 6, 2007. pp. 75-79.
9	Främling, K., Nyman, J.	Information architecture for Intelligent Products in the Internet of Things	To appear in Proceedings of 20th NOFOMA conference, 5-6 June 2008, Helsinki, Finland
10	Främling, K., Nyman, J.	The compromise between security and usability in the Internet of Things	To appear in Proceedings of APMS 2008 conference, 14-17 September 2008, Espoo, Finland
11	Markus Frey	PROMISE Presentation	PLM07 Conference Workshop, July 2007
12	Matta, A., Tomasella, M., Valente, A.	Impact of Ramp-Up on the Optimal Reconfiguration Policy for Modern Production Systems	CARV 07, International Conference on Changeable, Agile, Reconfigurable and Virtual production systems
13	Nyman, J., Främling, K., Michel, V.	Gathering Product Data from Smart Products	To appear In: Proceedings of 10th International Conference on Enterprise Information Systems (ICEIS) , Barcelona, Spain, 12-16 June, 2008.

14	Parlikad, A.K., Folan, P., Mascolo, J., McFarlane, D.C.	Improving automobile parts recovery using product lifecycle information	*International Conference on Product Lifecycle Management,* PLM' 07, Milan, May 2007.
15	Parlikad, A.K., Folan, P., Mascolo, J., McFarlane, D.C.	Improving automobile parts recovery using product lifecycle information.	Proceedings of the 4th International Conference on Product Lifecycle Management (PLM-SP3, 2007), Kilometro Rosso, Italy, 11-13 July, pp. 753-762.
16	Parlikad, A.K., McFarlane, D.C.	Decision support systems for product recovery: A Bayesian approach	*15th CIRP International Conference on Life Cycle Engineering*, Sydney, March 2008.
17	Parlikad, A.K., Theodorou, S., McFarlane, D.C.	Lifecycle information management: Key challenges	*2007 EU RFID Forum and 4th RFID Academic Convocation*, Brussels, March 2007
18	R. Fornasiero, D. Panarese	An application of the PROMISE-PLM system for the Middle of life Phase	Submitted to PRO-VE'08 – 9th IFIP Working Conference on Virtual Enterprises, Poznam, Poland, 8-10 September 2008
19	R.Fornasiero, A. Zangiacomi	Modelling decision support systems for Middle-of-Life in product lifecycle management	Submitted to ICE 2008 – 14th International Conference of Concurrent Enterprising, Lisboa, Portugal, 23-25 june 2008
20	R.Fornasiero, A.Zangiacomi, D.Panarese, J.Cassina, M.Taisch:.	An integrated approach to decision support for maintenance management: a case study for machine tools	International Conference on Product Lifecycle Management 2007 Milano Italy. Conference Proceedings ISBN 0-907776-32-9, pp.791-798.
21	R.Fornasiero, D.Panarese, J.Cassina, M.Taisch:.	Maintenance management: a case study for machine tools	Conference on Maintenance Management, Roma - 27-28 Settembre 2007
22	Zhou, J., Browne, J., Zhou, X., Folan, P., Li, Q., Xiao, T. (2007).	Fuzzy performance model construction & formalization: its use/reuse in the economic view.	Proceedings of IEEE International Conference on Systems, Man and Cybernetics, Montreal, Quebec, Canada, 07-11 October, pp. 354-360.

No	Authors	Title	Journal
1	Cao, H., Folan, P., Mascolo, J., Francone, N., Browne, J.,	RFID in product lifecycle management: a case in the automotive industry	Accepted by International Journal of Computer Integrated Manufacturing
2	Cao, H., Folan, P., Potter, D., Browne, J.	Knowledge-enriched shop floor control in end-of-life management.	Submitted to Computers in Industry.
3	Cassina, J., Tomasella M. , Taisch M., Matta A.	A new closed-loop PLM Standard for mass products	International Journal of Product Development (IJPD), accepted for publication, expected press date: January 2009
4	Fornasiero R., Panarese D., Cassina J., Taisch M.	Maintenance Management: un case study nel settore delle machine utensili	MM-Maintenance and Facility Management Journal, N. 6 (Novembre e Dicembre 2007), pp. 17-23, 2007
5	Främling, K., Ala-Risku, T., Kärkkäinen, M., Holmström, J.	Design Patterns for Managing Product Life Cycle Information	Communications of the ACM, Vol. 50, No. 6, 2007. pp. 75-79.
6	Främling, K., Harrison, M., Brusey, J., Petrow, J.	Requirements on unique identifiers for managing product lifecycle information - comparison of alternative approaches	International Journal of Computer Integrated Manufacturing , 2007
7	Matta, A., Tomasella, M., Clerici, M., Sacconi, S.	Optimal reconfiguration policy to react to product changes	International Journal of Production Research (in press)
8	Matta, A., Tomasella, M., Valente, A.	Impact of ramp-up on the optimal capacity-related reconfiguration policy	Flexible Services and Manufacturing Journal, Volume 19, N. 3 (Spetember 2007), pp.173-194, 2007
9	Matta, Andrea; Tomasella, Maurizio; Clerici, Matteo; Sacconi, Silvia	Optimal Reconfiguration Policy to react to Product Changes	International Journal of Production Research, Vol. 46, N. 10 (May 2008), pp. 2651-2673, 2008
10	Parlikad A.K.N., McFarlane, D.,	-based product information in end-of-life decision making	Control Engineering Practice, *Volume 15, Issue 11*, *November 2007*, *Pages 1348-1363*.
11	Parlikad, A.K., McFarlane, D.C	Impact of readily available information on vehicle component recovery	submitted to *Computers in Industry*
12	Parlikad, A.K., McFarlane, D.C	Recovering value from End-of-Life equipment: Exploring the information gap	Submitted to *Journal of Industrial Ecology*
13	Parlikad, A.K., McFarlane, D.C	Strategies for product recovery decisions	Submitted to *European Journal of Operations Research*.
14	R.Fornasiero, D.Panarese, J.Cassina, M.Taisch	Maintenance management: un case study nel settore delle macchine utensili	CNIM - MM-Maintenance and Facility Management n. 6 Nov-Dic. 2007 (ISSN: 1971-1735), pp: 17-23
15	Xu, D., Jun, H., Browne, J., Li, Q., Chen, Y., Kiritsis, D.	Modelling for information tracking and feedback based on wireless technology in CLSC.	Accepted by International Journal of Computer Integrated Manufacturing.
16	Hong-Bae Jun, Jong-Ho Shin, Dimitris Kiritsis, and Paul Xirouchakis	System Architecture for Closed-loop Product Lifecycle Management	International Journal of Computer Integrated Manufacturing, Vol. 20, No 7, pp. 684-698, Taylor & Francis publisher, 2007. (SCIE)

17	Hong-Bae Jun, Dimitris Kiritsis, and Paul Xirouchakis	Product lifecycle meta data modeling and its application	IEEE Transactions on Knowledge and Data Engineering, Vol. 19, No. 12, pp. 1680-1693, 2007. (SCI)
18	Hong-Bae Jun, Mathieu Cusin, Dimitris Kiritsis, and Paul Xirouchakis	A multi-objective evolutionary algorithm for EOL product recovery optimization: Turbocharger case study	International Journal of Production Research, vol. 45, no. 18, pp. 4573-4594, 2007 (SCI)
19	Hong-Bae Jun, Jong-Ho Shin, Youngseok Kim, Dimitris Kiritsis, and Paul Xirouchakis	A Framework for RFID applications in Product Lifecycle Management	Special issue of International Journal of Computer Integrated Manufacturing: Wireless Manufacturing, 2007 (SCIE)
20	D. Kiritsis, V.K. Nguyen, J. Stark	How closed-loop PLM can improve knowledge management over the complete product lifecycle?	International Journal of Product Lifecycle Management, (in print).

2.2 Presentations

Beside presentations on a series of research conferences mentioned above and the presentations listed in the chapter 3 *Sessions, workshops, national information days* PROMISE was presented at about 3 prominent events as listed below.

No	Authors	Title	Forum
1	Dimitris Kiritsis	From concept to crushing Combining PLM and RFID	GLOBAL RFID ROI 2008, 29-30 January 2008, Munich, Germany
2	Rosanna Fornasiero	PROMISE Demonstrator: MOL at CRF	PROMISE-BRIDGE-DYNAMITE training workshop, February 18-20, 2008, Lausanne, Switzerland
3	Robertino Solanas	PROMISE Demonstrator: EOL at Caterpillar	PROMISE-BRIDGE-DYNAMITE training workshop, February 18-20, 2008, Lausanne, Switzerland
4	Lion Benjamins	PROMISE Concepts 1: PLM Business needs	PROMISE-BRIDGE-DYNAMITE training workshop, February 18-20, 2008, Lausanne, Switzerland
5	Hong Bae Jun	PROMISE Concepts 2: BOL - MOL - EOL	PROMISE-BRIDGE-DYNAMITE training workshop, February 18-20, 2008, Lausanne, Switzerland
6	INFINEON	PROMISE Technologies 1: PEID	PROMISE-BRIDGE-DYNAMITE training workshop, February 18-20, 2008, Lausanne, Switzerland
7	SAP	PROMISE Technologies 2: Data Services (Middleware)	PROMISE-BRIDGE-DYNAMITE training workshop, February 18-20, 2008, Lausanne, Switzerland
8	InMediasP	PROMISE Technologies 3: PDKM	PROMISE-BRIDGE-DYNAMITE training workshop, February 18-20, 2008, Lausanne, Switzerland
9	Gognidata	PROMISE Technologies 4: DSS	PROMISE-BRIDGE-DYNAMITE training workshop, February 18-20, 2008, Lausanne, Switzerland
10	Parlikad, A.K.N	Standards for Product Lifecycle Management	The Open Group Architecture Forum Meeting, Austin, TX, 25th July 2007.

11	Parlikad, A.K.N. , Potter, D.	Standards for Product Lifecycle Management	The Open Group Board Meeting, Glasgow, 23rd April 2008.

2.3 Publications foreseen for publication

2.3.1 Book editions

PROMISE results are presented in four different books as described in the table below.

No	Authors	Title	Source
1	Cassina J., Tomasella M., Matta A., Taisch M., Felicetti G.	Closed-Loop PLM of Household appliances: an Industrial Approach	Advances in Production Management Systems, pp. 153-160 Springer Boston, 2007, ISBN 978-0-387-74156-7
2	Cassina J., Tomasella M., Taisch M., Marquard M., Metin A., Matta A.	Development of PROMISE data structure	Lean Business Systems and beyond, pp. 101-110, Springer Boston, 2008, ISBN 978-0-387-77249-3
3	Colledani M., Terkaj W., Tolio T., Tomasella M.	Development of a Conceptual Reference Framework to Manage Manufacturing Knowledge Related to Products, Processes and Production Systems	Methods and Tools for Effective Knowledge Life-Cycle-Management, pp. 259-284, 2008, Springer Berlin Heidelberg, ISBN 978-3-540-78431-9
4	Parlikad, A.K.N., McFarlane, D.C., Kulkarni, A.G.	Improving Product Recovery Decisions through Enhanced Information	Innovation in Life Cycle Engineering and Sustainable Development, Edited by Daniel Brissaud, Serge Tichkiewitch, and Peggy Zwolinski, Springer, 2006.
5	Kiritsis, D., Jun, H.-B., Xirouchakis, P.	Closing product information loops with product embedded information devices: RFID Technology and Applications, Models and Metrics	RFID technology and Applications," (edited by Stephen Miles, Sanjay Sarma, John Williams), ISBN-13: 9780521880930, Cambridge University press, 2007.
6	Kiritsis, D.	PLM and embedded information devices	Springer, in preparation.
7	Bufardi, A, Kiritsis, D., Xirouchakis, P.	Generation of Design Knowledge from Product Life Cycle Data	Methods and Tools for Effective Knowledge Life-Cycle-Management, Bernard, A. and Tichkiewitch, S. (Eds.), Springer, pp. 375-389.
8	Jun, H.-B., Kiritsis, D., Xirouchakis, P.	A primitive ontology model for product lifecycle meta data in the closed-loop PLM	Enterprise Interoperability II: New Challenges and Approaches, Springer verlag London Limited, Editors - R.J. Gonçalves, J.P. Müller, K. Mertins, and M. Zelm, pp. 729-740, 2007.

A PROMISE book(s) edition is planned mainly based on the documents developed in the Task TR12.4: Creation of architecture guide where the architecture guide document will be created. The Book shall provide a functional description of the PROMISE components, the interface specifications and a developer's guide to apply the PROMISE concepts, components and implementations (see chapter 3 for details).

3 PROMISE sessions, workshops, national information days

Architecture Series

The PROMISE architecture, its relevant interfaces and concepts are described in detail in the reference documentation entitled the **PROMISE Architecture Series**. While this is not a formal deliverable it is a significant achievement by the consortium to formulate an authoritative source of reference and documentation of the PROMISE information architecture. The documentation of the architecture is organised as described below.

- *Volume 1: Architecture Overview*: Describes the overall PROMISE information architecture, defines concepts and describes facilities of the architecture. It also describes the components of the PROMISE Architecture, their relationships and options for use, and it is intended to be used in combination with the other volumes in the series which are listed below.
- *Volume 2: Architecture Reference*: Provides and interface specification of the PROMISE Core PAC Interface.
- *Volume 3: Architecture Reference*: Provides a reference for the PROMISE Messaging Interface (PMI) and Data Services Concepts with complete descriptions of the methods and associated data structures.
- *Volume 4: Architecture Reference*: Provides the PROMISE PDKM System Object Model and interfaces.
- *Volume 5: Architecture Reference*: Provides complete descriptions of the data analysis functions provided by the PROMISE Decision Support Systems (DSSs)

Initially it had been anticipated that the following developer's guides could also be created before the end of the formal PROMISE project. These volumes will eventually be a significant contribution to the acceptance of PROMISE architecture and standards, therefore their eventual production will be coordinated by Promise Innovation.

- *Volume 6: Developer's Guide*: Descriptive guide to developing the hierarchy of PROMISE Product Embedded Information Devices (PEIDs).
- *Volume 7: Developer's Guide*: Descriptive guide to developing PROMISE Data Services
- *Volume 8: Developer's Guide*: Descriptive guide to implementing the PROMISE Product Data and Knowledge Management (PDKM) SOM.
- *Volume 9: Developer's Guide*: Descriptive guide to developing and implementing PROMISE Decision Support System (DSS)

Conference Sessions and workshops

Training and Dissemination Workshop organised by PROMISE, BRIDGE and DYNAMITE February 18th – 20ht 2008, Lausanne, Switzerland.

3.1 Planned PROMISE sessions and workshops

Academic dissemination will continue. D. Kiritsis will give invited talks and panel presentations in the following events:

- PLM'08, 7-9 July 2008, Seoul, South Korea
- ASME DTCE 2008, 4-6 August 2008, New York, USA
- WCEAM-IMS 2008, 28-30 October 2008, Beijing, China

3.2 PROMISE Web-sites

PROMISE has created two public available web-sites for informational and interacting purposes PROMISE academic site http://www.promise.no/ and the commercial web-site http://www.promise-plm.com/.

The Academic site has had about 68074 page accesses since February, 7th, 2005 when the site was launched. A ranking of main pages by access is given by the following table.

Page Title	Number of hits
1. PROMISE - PRODUCT LIFECYCLE MANAGEMENT AND INFORMATION TRACKING USING SMART EMBEDDED SYSTEMS	52114
2. PROJECT SUMMARY	13378
3. PARTICIPANTS AND CONSORTIUM	10432
4. CONTACT INFORMATION	9745
5. PRESENTATIONS AND REPORTS	8977
6. Relevant links	7520
7. R&D IMPLEMENTATION PLAN and INTERNATIONAL COOPERATION IMS	7195
8. PROMISE OBJECTIVES	6517
9. POTENTIAL IMPACT	6348
10. PROMISE KEY RESULTS	5820
11. DETAILED IMPLEMENTATION PLAN	4135
12. MANAGEMENT ACTIVITIES	3917
13. RESEARCH CLUSTERS ACTIVITIES (RC1 TO RC4)	3852
14. INNOVATION CLUSTERS ACTIVITIES	3839
15. APPLICATION CLUSTERS ACTIVITIES	3809
16. TRAINING CLUSTER ACTIVITIES	3193
17. Important events	1245
18. PROMISE deliverables	627
19. Training Workshop	372
20. IMS PROMISE	334