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SOCRADES

Project Full Title:

**Service-Oriented Cross-layer infRAstructure for
Distributed smart Embedded devices**

Proposal/Contract No: EU FP6 IST-5-034116 IP SOCRADES

Deliverable D9.1e

Dissemination Plan

30M Update

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¹ As defined in the DoW

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Executive Summary

The objective of the Dissemination Plan for SOCRADES is to identify and organise the activities to be performed in the future in order to promote the commercial exploitation of the project's results and the widest dissemination of knowledge from the project.

As the previous deliverable (D9.1d), this document presents planned Industrial dissemination activities: demonstrators created, participation to fairs and internal dissemination within larger industrial partners. Moreover, relevant planned actions for disseminating project's results within the scientific community are presented in this document. Since at the present the project is delivering results and demonstrators, more comprehensive and impactful dissemination actions have been planned (e.g. special sessions to show comprehensive results of the project).

The present deliverable presents:

- the description of the dissemination strategy
- dissemination activities scheduled for the next 8 months.

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1. Introduction

The objective of the Dissemination Plan for SOCRADES is to identify and organise the activities to be performed in order to promote the project's results with the widest dissemination of knowledge from the project. Dissemination is a horizontal activity and concentrates on disseminating the results of the project itself to a wide range of existing or potential stakeholders. International conference special sessions and workshops are planned to promote SOCRADES with:

- the notification of the project results in the scientific community,
- the promotion of the project in the industrial world,
- the dissemination via centres and networks of excellence.

Since the project is now delivering concrete results, SOCRADES Dissemination strategy has slightly changed. More importance is given to the plan and realization of Industrial Dissemination activities in order to disseminate the project's results to the relevant industrial stakeholders ([link to Exploitation of results](#)).

SOCRADES Dissemination strategy is mainly based on the following six actions:

1. Scientific, technical and general dissemination: including all publications for presentation at conferences, workshops and journals (both scientific and general news).
2. Patents, demonstrators and industrial dissemination (also Internal Dissemination within larger Industrial Partners): focus is the applicability of SOCRADES results to enhance industrial interest on the project.
3. Participation to industrial/commercial fairs: as SOCRADES consortium.
4. Website: to support both external dissemination and interaction between project partners and EC.
5. Brochure: to disseminate projects results, especially during conferences and workshops.

The Rules of Dissemination:

- Every project member can make proposals for results/products to be disseminated to the responsible task and work package leader.
- The work package leaders decide together with the dissemination manager on proposals towards the project leaders on what information to disseminate and on how the dissemination activities should be organised.
- If the "pull" strategy based on partners' proposals is not enough to reach the projects objectives in terms of dissemination, "Push" strategy can be used. "Push" strategy means that the dissemination manager stresses the main events, conferences, publications where SOCRADES should be presented and disseminated. Then during direct or remote meetings an agreement on which partner has to take the responsibility to represent SOCRADES is reached.
- For each partner there a responsible person was appointed in order manage more efficiently dissemination information and decisions. This person is a referent for any dissemination activity involving the partner.

Target groups:

- Science: both Research and development of new methodologies, technologies and tools for networked HW/SW systems embedded in smart physical objects which serve to initiate further scientific activities and introduction of the scientific results into the academic education.
- Companies: the main objective of the dissemination activities is the applicability of the developed procedures, instruments, tools and methods of SOCRADES

2. Dissemination Strategy

The Dissemination Strategy, as already described in previous deliverables (D9.1a-d), has to adapt to project status. Since at the present moment the results, demonstrators and applications can be shown, the strategy has now moving towards a more focused Industrial Dissemination. The main actions on which SOCRADES Dissemination Strategy is based are the following:

- **Scientific technical and general dissemination:**

SOCRADES Consortium already published and intends to publish a number of scientific documents that address the sharing of SOCRADES knowledge with the scientific Community taking the format of Peer reviewed journal papers, Peer reviewed conference papers, Presentations in conferences and workshops, Scientific Reports. Moreover, more effort has been made organizing special sessions within international conferences (INCOM 2009, IECON 2009), in order to enhance the impact of dissemination of project's results.

- **Patents, demonstrators and industrial dissemination**

This action has an industrial approach addressing the awareness and training of the professional Community. They will take the format of Manufacture of Technology Demonstrators, Papers on Technical Journal, Technical Reports. Moreover, Internal Dissemination is important in order to create internal awareness and support for the project within the larger industrial partners of the project (mainly Schneider Electric, ABB, Siemens, and SAP).

- **Participation to industrial/commercial fairs**

Participation to the most important fairs as SOCRADES consortium (already done in ICT 2008 and ITEA 2 Symposium 2008 and to be done in SPS/IPC/DRIVES 2009). The participation as consortium is fundamental to stress to public the relevance of the research carried out thanks to the collaboration of several partners and to strengthen the dissemination of SOCRADES name. In order to participate in this way to fairs a SOCRADES Fairs Budget has been prepared. This budget is taken proportionally from each SOCRADES partner's budget and will support fair participation as SOCRADES consortium. (see D9.1d)

- **SOCRADES website**

The SOCRADES website (www.socrades.eu) contains areas for public use where a marketing image around SOCRADES has been created. The website is constantly kept up-to-date and improved, considering also the necessities related to Internal dissemination.

- **Brochure & Leaflet**

A brochure to support the awareness and promotion of the SOCRADES project, its vision has been completed. The brochure has been designed to contain insert pages, which can be rearranged as necessary. Therefore, the brochure will promote the vision and concept, whilst the internal pages will provide information upon particular aspects of the SOCRADES project. The brochure can pack a different number of inserts according to the objectives of the dissemination.

2.1. Dissemination complements Exploitation (and vice-versa)

An important point to be considered is the strong linkage between Dissemination (WP9) and Exploitation (WP10). This two workpackages are virtually complemented the one by the other and in particular, the work carried out in WP10 about Standardization and Roadmapping are strictly related to dissemination.

Road mapping and Standardization activities support Dissemination. Internal Workshops, External Workshops with international experts on SOCARDES related areas of research and Survey (extended to both

internal and external experts) are also ways to make a wide public, made of expert and interested people, aware of SOCRADES.

2.2. Dissemination Planning Instruments

The instruments that enable the user to plan several dissemination activities have been described in D9.1a-d. They describe the process from the idea or decision of disseminating until the final realisation. The proposed steps ought to guide the user through those main points to attend in preparing the activities.

3. Planned Dissemination Activities

In this section we present the planned activities for the future. Since the planning period considered is made of next 8 months (PM30-38), we do not divide anymore the plan into Short term detailed schedule and Long term planning (this was done in the previous deliverables - D9.1a-d).

3.1. Dissemination activities carried out to PM30

In addition to what mentioned in D9.1d, several activities have been carried out in the last period (M25-30). In order to avoid redundancies, these activities have been mentioned only in the Project Report D11.2e (under Dissemination section). These include both Industrial dissemination (fairs participation and demonstrators presented, internal dissemination) and Scientific, technical and general dissemination. Hence, for further details on Dissemination activities already carried out (M25-M30) please refer to D11.2e.

3.2. Planned Activities

Several activities have been planned in order to widely and frequently disseminate SOCRADES concepts and results.

Before presenting the detailed list of planned activities, we highlight the most important and impactful ones.

- A special session on “Service-Oriented Cross-layer infrastructure for distributed smart embedded devices” has been organized at 13th IFAC Symposium on Information Control Problems in Manufacturing (INCOM 2009), Moscow, Russia, June 3 - 5, 2009. The aim is to broadly disseminate SOCRADES results in a more comprehensive way, collecting papers and presentations that represent the multiple aspects of SOCRADES projects. Several papers from SOCRADES partners will be presented and published.
- Several papers and SOCRADES member will participate to the 7th IEEE International Conference on Industrial Informatics (INDIN 2009, chaired by SOCRADES Co-ordinator), June the 24-26th 2009, Cardiff, Wales. The theme of INDIN 2009 is "Innovation in Production Machines and Systems". Within the conference a Roadmapping workshop will be organized in order to raise attention on SOCRADES contributions and to collect fruitful inputs on next challenges in SOCRADES domain looking at the industrial application from selected experts. This workshop will be organized with efforts coming both from WP9 (Dissemination) and WP10 (Exploitation, standards & roadmapping).
- A special session on “Energy Efficient Factories: The role of Industrial Informatics” has been organized at IECON 2009 is the 35th Annual Conference of the IEEE Industrial Electronics Society, Porto, Portugal, November 3 - 5, 2009. Aim of this conference is raise interest on the impact of industrial informatics on industrial challenges, such as Energy Efficiency. In this context, interesting results coming from SOCRADES project will be presented.
- SOCRADES Consortium will participate to SPS/IPC/DRIVES 2009 Electric Automation Systems and Components Exhibition & Conference, November the 24-26th 2009. SPS/IPC/DRIVES is the exhibition for electric automation technology. The key topics 2009 at exhibition and conference are: Energy Efficiency,

Industrial Identification, Safety and Security. In this event SOCRADES results will be disseminated and new complete demonstrators will be presented.

- Finally, attention will be put in order to disseminate SOCRADES results within other on-going projects: for example SOCRADES Roadmap will be considered within IMS2020 project. IMS2020 is an FP7 NMP project that aims at revising relevant roadmaps related to industrial domain, and at determining new research directions under the IMS (Intelligent Manufacturing System) perspective. Connection with IMS2020 is guaranteed by Prof. Taisch (IMS2020 Co-ordinator).

Here follows a detailed list of activities to be carried out in the next future (next 8 months, PM 30-38)

| Planned | Type | Type of audience | Countries addressed | Partner involved |
|--------------------|---|-----------------------|---------------------|------------------|
| March – April 2009 | <i>Newsletter:</i> Article describing SOCRADES project to be published in IFIP (International Federation for Information Processing) Newsletter March/April 2009. | Research and Industry | International | POLIMI |
| 1-2 April 2009 | <i>Paper:</i> “Development of an Extended Product Lifecycle Management through Service Oriented Architecture.” to be presented at CIRP IPS ² Conference - Industrial Product-Service Systems, Cranfield, UK. | Research and industry | International | POLIMI |
| April 2009 | <i>INTERNAL DISSEMINATION:</i> Presentation: Socrades WP4 demo | R&D team | 25 | ABB |
| May 2009 | <i>Paper:</i> “Enabling Component-Based Design for Embedded Real-Time Software”, Jimmie Wiklander, Jens Eliasson, Andrey Kruglyak, Per Lindgren, Johan Nordlander Accepted for publication in Journal of Computers (JCP), ISSN : 1796-203X | Research | International | LTU |
| 3-5 June 2009 | <i>SPECIAL SESSION:</i> Special Session on “Service-Oriented Cross-layer infrastructure for distributed smart embedded devices” at 13th IFAC Symposium on Information Control Problems in Manufacturing (INCOM 2009), Moscow, Russia, June 3 - 5, 2009. | Research and industry | International | |
| 3-5 June 2009 | <i>Paper:</i> “Trends and roadmaps on SOA-based embedded networks for industrial automation systems: a review” to be presented at INCOM’09 the 13th IFAC Symposium on Information Control Problems in Manufacturing, Moscow, Russia | Research and industry | International | POLIMI |
| 3-5 June 2009 | <i>Paper:</i> “Assessing the future of manufacturing: the SOCRADES Technology Roadmap” to be presented at INCOM’09 the 13th IFAC Symposium on Information Control Problems in Manufacturing, Moscow, Russia | Research and industry | International | POLIMI |
| 3-5 June 2009 | <i>Paper:</i> V. Villasenor, A. Vidales and J.L. Martinez Lastra “Developing Communications between a Service-Enabled Manufacturing system and a Multi-Agent System” to be presented at INCOM’09 the 13th IFAC Symposium on Information Control Problems in Manufacturing, Moscow, Russia | Research & Industry | International | TUT |
| 3-5 June 2009 | <i>Paper:</i> “Integration of Cross-layer Web-based Service-oriented Architecture and Collaborative Automation Technologies: The SOCRADES Approach” to be presented at INCOM’09 the 13th IFAC Symposium on Information Control Problems in Manufacturing, | Research and industry | International | SE |

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|-------------------------------|--|---|---------------|----------|
| | Moscow, Russia (<i>Under review</i>) | | | |
| 3-5 June 2009 | <i>Paper</i> : R. Harrison, A. Colombo, A. Bepperling, C.S Mcleod, T. Kirkham "A Service Enabled Approach to Automation Management" to be presented at INCOM'09 the 13th IFAC Symposium on Information Control Problems in Manufacturing, Moscow, Russia | Research and industry | International | LBORO/SE |
| 24-26 June 2009 | <i>Paper</i> : V. Barot, R. Harrison, C.S. McLeod "An architectural description of a prototype supporting real-time remote data"" to be presented at INDIN'09 the 7th IEEE International Conference on Industrial Informatics, Cardiff, UK (<i>Under review</i>) | Research and industry | International | LBORO |
| August 2009 | C. Ramesh, K J. Johansson, "Multiple access with attention-based tournaments for estimation over networks", ECC 2009 | Research & Industry | International | KTH |
| August 2009 | P. Soldati and M. Johansson, "Deadline-constrained transmission scheduling and data evacuation in wirelessHART networks", ECC 2009 | Research & Industry | International | KTH |
| 23-26 August 2009 | <i>Paper</i> : Maben Rabi, Karl Henrik Johansson "Scheduling packets for event-triggered control" to be presented at The European Control Conference (ECC), Budapest, Hungary | Research and industry | International | KTH |
| August 31 - September 2, 2009 | <i>Presentation</i> and <i>publication</i> , topic: MAS (HoloMAS 2009) | Research and industry | Worldwide | TUT |
| 2009 | <i>Journal Paper</i> : SOA in reconfigurable supply chains: A research roadmap (Journal Engineering Applications of Artificial Intelligence) | Research and industry | Worldwide | SE |
| 2009 | <i>Journal Paper</i> , topic: Specification of a Multi-Agent System-based Decision Support System (Journal EAAI) | Automation and control engineers, electronic and electrical engineers | Worldwide | TUT |
| September 2009 | <i>Journal Paper</i> : P. Phaithoonbuathong, T.Kirkham, R. Harrison, R.P. Monfared, A.A. West "Web Service Based Automation of a Live Production System" submitted (Feb 09) to International Journal of Computer Integrated Manufacturing (IJCIM) | Research and industry | Worldwide | LBORO |
| 3-5 November 2009 | <i>SPECIAL SESSION</i> : Special Session to be organized at IECON 2009 is the 35th Annual Conference of the IEEE Industrial Electronics Society. | Research and industry | Worldwide | |

SOCRADES dissemination activities are not limited to the previous list. As a matter of facts the list is intended to be kept updated as new dissemination activities are planned.