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Abstract

This document is describing the general plan for disseminating the results of PERFoRM. It gives an overview about the strategy behind the dissemination activities and summarizes actions which already have been performed within the first half of the project's runtime. Furthermore, it describes a plan, for upcoming dissemination actions, which will follow after this first iteration of this report.

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1. Introduction

Within the first 18 months of PERFoRM's runtime, the project already has produced a big amount of interesting results, which are not only relevant within the scope of the project, but also will have an impact to the whole industrial world. To ensure that the results of the project also raise awareness outside of the project's consortium, an extensive dissemination strategy is essential. The dissemination activities are targeted at different target audiences, including the scientific and the industrial world, but also a general audience.

This document describes the dissemination plan of PERFoRM by giving an overview of the general strategy and selecting the different channels used. It is giving a comprehensive overview about the dissemination activities, which have been carried out and shows a roadmap for future potential activities.

This first iteration of the dissemination plan is concentrating on publishing the general ideas of PERFoRM and disseminating intermediate results and early outcomes from the first 18 months of PERFoRM.

2. Elements of the Dissemination Strategy

The general dissemination strategy within PERFoRM is including various channels for raising awareness of the project's results. On the one hand, it uses all the classical channels for dissemination. This includes the participation at international conferences and exhibitions with presentations and booths to attract both scientific and industrial audience. The PERFoRM consortium is also generating dissemination platforms by themselves, by organizing special sessions and workshops.

Various written publications are generated based on specific results. These can be scientific papers and articles in international conferences and journals in different areas. For non-scientific audiences, press releases and reports in non-scientific and technical-oriented magazines are planned. Furthermore, different information and advertising material, like brochures and flyers, is generated.

Additional to these classical ways of dissemination, the inclusion of modern publication platforms is an integral part of PERFoRM's dissemination strategy. The foundation for this is a web page, which is the central point for getting information about PERFoRM and which is updated regularly with news about the project's status. PERFoRM also includes social media platform as part of its dissemination strategy, using platforms such as Twitter and Facebook to publish the project.

2.1. Target groups and audiences

To ensure the impact of the project, it is necessary to not just concentrate on one target audience, but to include various groups into the dissemination plans. Only when publishing the results to

a broad audience, a general acceptance of PERFoRM's results can be achieved. The following main target audiences have been selected:

- Industrial companies
- Scientific community
- General public
- PERFoRM consortium

Each of these different audiences require a different focus for the dissemination. Industrial companies are interested more in the applicability of the developed architectures, methodologies, technologies and tools within real industrial applications. This requires the generation of convincing demonstrators and being able to show reference applications in real industrial use cases.

The scientific dissemination must target very strongly the research aspects of the outcomes of PERFoRM, concentrating on demonstrating new technologies, methodologies and tools, describing scientifically the underlying approaches. Typical applications to achieve this are the submission of scientific papers in international conferences and journals. Additionally, young academics have to be approached, by introducing PERFoRM's scientific results directly into academic programs.

The general public is less interested in internal details, but needs to have good comprehensive information available, which explains the goals and approaches of PERFoRM in a way, which doesn't require in depth technical knowledge. For these audiences, dissemination material like flyer and brochures, as well as a web page is essential.

Another target is the PERFoRM consortium itself, which also needs a platform to communicate and work together and which needs a common information platform to stay up-to-date about the latest developments. This can be achieved by providing platforms for communication (e.g. mailing lists) and data exchange. Regular meetings also support the distribution of results within the consortium.

2.2. The Rules of Dissemination

The responsibility to perform the dissemination activities envisioned in this dissemination plan lies within the whole consortium. Each member of the PERFoRM team is required to think about which results are valid for publication and has to take actions to find the right channels. The general policy for dissemination includes the following points:

- Each member is allowed and encouraged to make proposals for results to be disseminated
- The general idea has to be proposed to the dissemination task leader, the corresponding work package leader from the work package which has generated the result and the

project coordinator and together a decision on whether the result will be published will be taken

- Each partner should look for synergies with other partners to encourage joint activities
- The partners are encouraged to notify the dissemination task leader and the consortium about interesting dissemination opportunities they know of, even when they don't have results to publish themselves
- The consortium needs to be informed about a dissemination action two months before the action takes place and have the right to object the participation
- The individual contributions (e.g. written papers, articles, demonstrators) need to be presented to the consortium at least on a conceptual level at least one month before the submission

3. Dissemination Planning Instruments

This chapter describes a list of instruments which should be used as a guideline for the different activities to be carried out. It proposes multiple steps, which come with each specific activity and suggests deadlines for each activity. These guidelines have to be adapted to each individual, actual activity, since various factors can result in varying steps and deadlines.

3.1. Participation at relevant international and national events

Table 1: Guideline for event participation

Action	Deadlines
Identification of relevant international, national and regional events	Continuous process
Selection of event	3-4 months before
Cost-benefit analysis and decision on participation	2.5 months before
Locate partners to support the event participation	2.5 months before
Announce wish to participate at event to consortium	2 months before
General Organization of the participation (registration, documents, travel, ...)	2 months before
Technical Organization of the participation (presentations, demonstrators, partner contributions, ...)	1 month before
Distribution of contribution within consortium	1 month before
Participation at event	

3.2. Presentation at international and national conferences

Table 2: Guideline for conference presentations

Action	Deadlines
Identification of relevant international, national and regional conferences	Continuous process
Selection of conference fitting to result	6-9 months before
Cost-benefit analysis and decision on participation	6 months before
Locate partners to support the paper creation	6 months before
Announce wish to participate at conference	6 months before
Write draft of scientific paper	5 months before
Distribute draft among consortium	5 months before
Submission of scientific paper	4 months before
General Organization of the participation (registration, documents, travel, ...)	3 months before
Technical Organization of the participation (presentations, ...)	1 month before
Presentation at conference	

3.3. Publications in relevant research journals

Table 3: Guideline for journal publications

Action	Deadlines
Identification of relevant scientific journals	Continuous process
Selection of fitting journal	6-9 months before
Cost-benefit analysis and decision on participation	6 months before
Locate partners to support the article creation	6 months before
Announce wish to write article for journal	6 months before
Write draft of journal article	5 months before
Distribute draft among consortium	5 months before
Submission of article	4 months before

3.4. Transfer of knowledge to relevant associations

Table 4: Guideline for journal publications

Action	Deadlines
Identification of relevant associations	Continuous process
Selection of fitting association	4 months before
Create public relation material (e.g. presentation, flyer, ...)	3 months before
Contact responsible person of selected association	2 months before
Select joint activities with selected association	1 months before
Implement joint activities	

3.5. Training measures for target groups

Table 5: Guideline for trainings/workshops

Action	Deadlines
Identification of possible training activities targeted to specific groups	Continuous process
Selection of a specific training/workshop topic	5 months before
Selection of partners to contribute to the training/workshop	5 months before
Develop training concept (structure, topics, coarse schedule)	4 months before
Inform consortium about wish to organize training	4 months before
Send out invitations and advertise training to potential participants	3 months before
Set up infrastructure (place, rooms, schedules)	3 months before
Develop detailed training contents	2 months before
Organization of training event (catering, equipment, ...)	1 months before
Run the training/workshop	

3.6. Performing dissemination events

Table 6: Guideline for other event organisations

Action	Deadlines
Identification of possible events to be carried out	Continuous process
Selection of a specific event	5 months before
Selection of partners to contribute to the event	5 months before
Develop basic concept (structure, topics, coarse schedule)	4 months before
Inform consortium about wish to organize event	4 months before
Send out invitations and advertise event to potential participants	3 months before
Set up infrastructure (place, rooms, schedules)	3 months before
Develop detailed contents	2 months before
Organization of event (catering, equipment, ...)	1 months before
Run the training/workshop	

4. Performed Dissemination Activities

The following sub-chapters are providing an overview about the various dissemination activities carried out throughout the first 18 months of PERFoRM. The activities mainly focused mainly on the dissemination of PERFoRM's general idea and approaches and publishing early developments and results from the early implementation work packages (WP1-4) as well as intermediary results.

4.1. Event Participation

Within the first 18 months, the PERFoRM partners have participated at the following events, including international conferences, workshops and others.

Table 7: Participation at events

Date	Event	Place	Target Audience	Type of Participation	Size of Audience	Leading Partner
03.02.2016 - 04.02.2016	Automatisierungstage 2016	Emden, Germany	local industrial companies	booth with PERFoRM poster	200	HSEL
23.03.2016 - 24.03.2016	European Robotics Forum 2016	Ljubljana, Slovenia	Scientific	presentation of PERFoRM goals + approach		Siemens

14.04.2016 - 15.04.2016	Impact of the Factories of the Future PPP	Brussels, Belgium	FoF project leader	presentation of PERFoRM goals + approach		Siemens
22.06.2016 - 24.06.2016	Industrial Technologies 2016	Amsterdam, Netherlands	Industrial, Scientific	booth with poster		POLIMI
06.10.2016 - 07.10.2016	SOHOMA'16	Lisbon, Portugal	Scientific, Industrial	Special Session		UNINOVA, IPB
24.10.2016 - 27.10.2016	IEEE IECON'16	Florence, Italy	Scientific, Industrial	Special Session, Industry Forum		Siemens, HSEL, UNINOVA, IPB

4.2. Scientific and technical publications

The following papers have been presented at international conferences within the first 18 months of PERFoRM.

Table 8: Papers presented at international conferences

Date	Event	Place	Target Audience	Title	Authors
07.10.2016	SOHOMA '16	Lisbon, Portugal	Scientific, Industrial	A description and analysis method for reconfigurable production systems	Filippo Boschi, Giacomo Tavola, Marco Taisch
07.10.2016	SOHOMA '16	Lisbon, Portugal	Scientific, Industrial	Instantiating the PERFoRM System Architecture for Industrial Case Studies	Paulo Leitao, Jose Barbosa, Matthias Foehr, Ambra Cala, Pietro Perlo, Gregorio Iuzzolino, Pierluigi Petrali, Johan Vallhagen, Armando Walter Colombo
26.10.2016	IECON'16	Florence, Italy	Scientific, Industrial	Assessment of industrial middleware technologies for the PERFoRM project	Jeffrey Wermann, Frederik Gosewehr, Armando Walter Colombo
26.10.2016	IECON'16	Florence, Italy	Scientific, Industrial	Specification of the PERFoRM architecture for the seamless production system reconfiguration	Paulo Leitao, Jose Barbosa, Arnaldo Pereira, Jose Barata

					Oliveira, Armando Walter Colombo
26.10.2016	IECON'16	Florence, Italy	Scientific, Industrial	Selection of a data exchange format for industry 4.0 manufacturing systems	Ricardo Silva Peres, Mafalda Parreira Rocha, Andre Dionisio Rocha, Jose Barbosa, Paulo Leitao, Jose Barata Oliveira
26.10.2016	IECON'16	Florence, Italy	Scientific, Industrial	Functional requirements for reconfigurable and flexible Cyber-Physical System	Filippo Boschi, Marco Taisch, Giacomo Tavola, Cristiano Zanetti
27.10.2016	IECON'16	Florence, Italy	Scientific, Industrial	Towards Industrial Exploitation of Innovative and Harmonized Production Systems	M. Foehr , A. Calà , O. Meyer , F. Boschi, P. M. Fantini, P. Perlo, P. Petrali, J. Vallhagen
27.10.2016	IECON'16	Florence, Italy	Scientific, Industrial	Exploring the integration of the human as a flexibility factor in cps enabled manufacturing environments: methodology and results	P. Fantini, G. Tavola, M. Taisch, J. Barbosa, P. Leitao, Y. Liu, M. Sayed, N. Lohse

4.3. Participation at fairs

PERFoRM's results have been presented at the following fairs:

Table 9: Participation at fairs

Date	Event	Event Type	Place	Target Audience	Type of Participation	Size of Audience	Leading Partner
03.02.2016 - 04.02.2016	Automatisierungstage 2016	Fair	Emden, Germany	local industrial companies	booth with PERFoRM poster	200	HSEL

5. Planned Dissemination Activities

This chapter describes future activities concerning the dissemination of PERFoRM's outcomes, following this month 18 report. Since the results during the second half of PERFoRM are already more mature, most of the publications are expected during this phase. The results of the

development work packages (WP1-4) will be published in various national and international conferences and the demonstrators and use case implementations will be demonstrated at fairs and technical workshops.

5.1. Event participation

The following list is proposing a set of possible event participations in international conferences, workshops and others. The events should be used as a platform to disseminate PERFoRM results, such as creating special sessions or poster booths in conferences. It is planned to participate in at least 8 international conferences and create at least one special session targeting PERFoRM relevant topics.

Table 10: Planned event participations

Date	Event	Place	Target Audience	Type of Participation	Size of Audience	Leading Partner
24.07.2017 - 26.07.2017	IEEE INDIN'17	Emden, Germany	Scientific, Industrial	technical support, Special Session, booth, demonstrator	200	HSEL
Sep 2017	HoloMAS'17		Scientific, Industrial	Special Session, Industry Forum		
Oct 2017	SOHOMA'17		Scientific, Industrial	Special Session, Industry Forum		
29.10.2017 - 01.11.2017	IEEE IECON'17	Beijing, China	Scientific, Industrial	Special Session, Industry Forum		

5.2. Scientific and technical publications

Additional to the already existing publications, it is envisioned to keep publishing various research results in scientific papers. Based on these papers, at least two journal articles in international renowned journals are planned. The following lists are providing an overview about already existing planned publications and additional options for future contributions.

Table 11: Planned scientific paper contributions at conferences

Event	Place	Target Audience	Title	Authors
INDIN'17	Emden, Germany	Scientific, Industrial	Generic application module for integrating Material flow Simulation tools in a service oriented industrial context	Siemens
INDIN'17	Emden, Germany	Scientific, Industrial	Design and Implementation of the Demonstrator for the validation of the technologies for the next generation of manufacturing systems	MTC

INDIN'17	Emden, Germany	Scientific, Industrial	state-of-the-art Migration strategies and a possible new migration approach towards cyber-physical production systems	Siemens, IPB
INDIN'17	Emden, Germany	Scientific, Industrial	A harmonized approach for constructing of robust and efficient technology backbone for a next generation of agile manufacturing systems	FhG-IPA
INDIN'17	Emden, Germany	Scientific, Industrial	PERFoRM Middleware design and implementation	HSEL

Table 12: Planned article contributions to journals

Publishing Date	Journal Name	Target Audience	Type of Participation	Leading Partner
2017/2018	Transaction Industrial Informatics Special Issue: PERFoRM contribution to Industry 4.0 (Proposal)		Article	

5.3. Technical workshops

Since PERFoRM's focus is on industrial application of the results, it is important to find ways to disseminate the results to potential industrial adopters in technical workshops. It is envisioned to create up to 6 technical workshops within PERFoRM's duration.

5.4. Participation at fairs

Another opportunity to find a broad dissemination within an industrial audience is the participation at national and international fairs. It is planned to attend multiple fairs to present PERFoRM with small demonstrators and/or posters.

6. Conclusion

This document provides a general procedure and plan to disseminate the results of PERFoRM within various bodies and events. A clear dissemination procedure with time frames and the individual steps to be taken is described. Furthermore, the document proposes many ways for dissemination. In many cases, these ways already have been used within the first 18 months of PERFoRM to demonstrate and publish the various outcomes which have been achieved so far. These activities are listed within this document. Additionally, the document already provides a plan for future dissemination activities.

It is planned to use the general structure of this document and keep the lists updated with upcoming dissemination activities and plans. These will be reported in the second iteration of the PDUf.