Innovation, Coordination and Collaboration in Service Driven Manufacturing Supply Chains

CEN/WS/IRM (N° 39)

Business Plan for a CEN Workshop 39: “InCoCo-S Reference Model for Industrial Services (IRM)”

(Version 1.1, 18th December 2007)
Table of Contents

1 Status of this Business Plan ................................................................. 2
2 Workshop Proposers .......................................................................... 2
3 Workshop objectives ........................................................................ 2
4 Workshop's Work Programme ........................................................ 4
  4.1 Languages .................................................................................. 4
  4.2 Work Item .................................................................................. 4
  4.3 Deliverable ................................................................................ 4
  4.4 Work Plan .................................................................................. 5
5 Workshop Organization ..................................................................... 5
  5.1 Roles & Responsibilities .............................................................. 5
  5.2 Meetings .................................................................................... 5
6 Resources ........................................................................................ 6
7 Related Activities - Liaison .............................................................. 6
8 Contact Points .................................................................................. 6
1 Status of this Business Plan


2 Workshop Proposers

The proposal for this CEN Workshop originates from the project InCoCo-S1 “Innovation, Collaboration & Coordination in Service Driven Manufacturing Supply Chains”, a European Project co-funded by the European Commission in the Sixth Framework Programme. The key aim of the project is to develop an integrated business process reference model for diverse kinds of industrial services including Third Party Logistics (3PL), Maintenance, Modernization (Retrofit), Packaging, and Quality Control services which are being increasingly outsourced by manufacturing companies to external service providers.

Standardization is an integral part of the project and supported by the Consortium of Partners of InCoCo-S as a means of diffusing and disseminating knowledge and innovative approaches on technology. InCoCo-S Consortium consists of several research institutes, business case partners, IT-suppliers, SME Partners etc. The development of the “InCoCo-S Reference Model for Industrial Services (IRM)” has been the central focus of the entire InCoCo-S project. The proposal to standardize IRM through a CWA is made by the following consortium members:

- Forschungsinstitut Fuer Rationalisierung e.V. (FIR), Aachen, Germany
  Dr. Volker Stich, Mr. Amit Garg
- H2O Organisationsoptimierung GmbH (H2O), Augsburg, Germany
  Mr. Herbert Heinzel
- Eidgenoessische Technische Hochschule Zürich, Switzerland
  Prof. Dr. Paul Schönsleben, Mr. Oliver Schneider
- Politecnico Di Milano (POLIMI), Milan, Italy
  Prof. Marco Taisch, Mr. Marco Gerosa
- SKF GMBH (SKF), Schweinfurt, Germany
  Mr. Stefan Schleyer

3 Workshop objectives

Main goal of the workshop is to establish a Business Framework for Supply Chain related services for next generation BPM (Business Process Model), the IRM. The InCoCo-S Consortium is a new BPM advocacy group comprised of end users, service providers, and

---

1 For more information on the Project and Consortium Members refer to www.incoco.net.
technology vendors. They are committed to helping companies, especially SME’s, to successfully adopt service-oriented BPM.

The IRM Consortium vision, mission, value proposition, strategies and tactics are built on the following premises:

- Service-oriented BPM adoption is a key enabler for the 21st century enterprise
- Achieving the benefits of service provider integration in supply networks requires significant changes for both manufacturers and service providers
- Service-oriented BPM is a business agility issue, linking process understanding and ICT infrastructure (BPM meets SOA)
- IRM is both a Framework and a Methodology to enable fast and easy application of this Framework by industrial users.
- The IRM framework provides the reference architecture building blocks and standard performance metrics to connect enterprise value chains and their business partners.

The IRM methodology enables translation and alignment of the enterprise value chain into an executable plan. This will allow companies to measurably realise their strategy, goals and objectives. It supports businesses to strategically optimise their agility, innovation and reaction time to changing conditions in a global environment.

The IRM framework provides robust reference dictionaries and methods that are tested and proven for the extended enterprise value-chain. The standard framework promotes consensus and helps drive continuous improvement in processes. The integrated process framework guides modeling, design, and measurement of business performance by uniquely encompassing the plan, execution and support requirements for the 'design/adapt, build and operate' aspects of business. IRM supports a consensus-driven and non-proprietary, open source standard and seeks the diversity of business models of manufacturers and service providers willing to share value chain perspectives, strategies and best practices.

The IRM methodology comprises a set or system of methods, principles, and rules for regulating the discipline of process modeling for industrial services. Its underlying structure is integrated into the IRM model enabling analysis of value chain strategies and interactions. The IRM framework contains the following standard building blocks:

- **Metrics** - quantifiable variables that reflect a specific state of business performance during process planning and execution within a strategic value chain context.
- **Inputs** – defining movement of information or material from a process element or the environment into another process element. Each input, which is received from a process element or external environment, may be required by that process to deliver its added value.
- **Outputs** - describing resultant information or material from a process element. Each output signifies a value added deliverable for that process element and may be required as an input by other process elements or external environment.
- **Best Practices** – the knowledge to successfully manage processes, tools, organization, knowledge, etc. that maximizes value to the sponsors of the particular enterprise. This is
contained in industry proven standard operating procedures for a given business type and can be transferred across industry segments, especially via interfaces between manufacturers and service providers.

- **Technologies** – sets of resources that support exchange of information between business partners and their processes and enable best practice execution on high performance levels activities.

- **Sub Reference Models** - company or industry specific models that are derived from the generic IRM to provide a context at a core process level and decompose processes at respective lower operational or implementation level.

Sub IRM dictionaries are created to provide company, industry and/or domain specific activity models. These application models are loosely coupled to provide flexibility while maintaining context to an overarching IRM framework. Activity models based on IRM can provide valuable inputs for SMEs to get started with business process analysis, process modeling or performance monitoring by offering pre-configured service supply chain scenarios in a given business environment.

### 4 Workshop's Work Programme

#### 4.1 Languages

The Workshop’s working language will be English and the proposed CWA shall be drafted and published in English.

#### 4.2 Work Item

The work item of the workshop is a generic business process reference model for diverse kinds of industrial services, such as Maintenance Services, Modernization (Retrofit) Services and Packaging Services. The specification shall include a generic description of the IRM, elaboration of key process phases, process hierarchy and process workflow at the generic level as elaborated in IRM. In addition, the specification will include terminology adapted to the requirements of industrial service providers, best practices and service performance measurement system.

#### 4.3 Deliverable

The deliverable of the CEN Workshop shall be a single CWA providing the Reference Process Model for industrial services as explained in Section 3 and 4.2. This single CWA is presently intended to incorporate three key services as an exemplary application of the general model – Maintenance, Modernization & Packaging services respectively.
4.4 Work Plan

The standardization Workshop will last until 31st March 2008. The timeline for the key activities will be as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing 1st Business Plan</td>
<td>21st Sept 07</td>
</tr>
<tr>
<td>Workshop Kick-off</td>
<td>10th of Dec 07</td>
</tr>
<tr>
<td>Development of 1st CWA Draft</td>
<td>end of Dec 07</td>
</tr>
<tr>
<td>Comments on 1st CWA Draft</td>
<td>end of Jan 08</td>
</tr>
<tr>
<td>Approval of Final CWA Draft approved by WS participants electronically</td>
<td>Feb 08</td>
</tr>
<tr>
<td>Publication of CWA</td>
<td>March 08</td>
</tr>
</tbody>
</table>

Table 1: CEN/WS/IRM Work Plan

5 Workshop Organization

5.1 Roles & Responsibilities

The workshop proposers suggest a Chair and two Vice-Chairs to be appointed, subject to the approval of the Workshop Kick-Off Meeting in December 2007. The proposed Chair is Dr. Volker Stich, Director of FIR – Research Institute for Operations Management at RWTH Aachen University. Proposed Vice-Chairs are Amit Garg (FIR) and Herbert Heinzel (H2O).

The responsibility of the **Workshop Chair** is the following:

- To preside at Workshop plenary meetings.
- To ensure that the Workshop delivers in line with its Business Plan.
- To manage the consensus building process
- To respond to queries regarding the content of the CWA
- To interface with the CEN/CMC regarding strategic directions, problems arising, external relationships, etc.

The Vice-Chairs will support and assist in all responsibilities outlined for the Chair.

The Workshop Secretariat will be provided by the German CEN Member DIN – German Institute for Standardization e. V., subject to the endorsement of the Kick-Off Meeting. DIN is subcontracted by InCoCo-S consortium for standardization activities. The activities carried out by the Workshop Secretariat are specified in the subcontract.

5.2 Meetings

- The Workshop members shall meet in person not more than twice; at the kick off meeting & again to carry out a review of the draft CWA. Drafts and all other relevant matters shall be distributed and discussed electronically, making use of LIVELINK. The infrastructure
for electronic operation shall be LIVELINK, with access provided and contents maintained by DIN. All members of the Workshop shall adhere to the rules and conditions of LIVELINK. The access and use is free of cost for members of the Workshop.

- Registered participants not able to attend a plenary meeting may be electronically involved in the CWA approval process by email lists and LIVELINK.
- General characteristics of CEN Workshops to be followed are documented and available at the [CEN Website](#).

## 6 Resources

Participation in the standardization Workshop is free of charge for any interested parties. External participants will however have to bear their own travel & subsistence expenses for attending the Workshop meetings.

Internally, the InCoCo-S consortium members will cover their costs of participation and contribution to the CWA through their efforts in the project.

## 7 Related Activities - Liaison

The Workshop will take due account and liaise with relevant international, European and national projects. A list of projects to be considered will be prepared after the Workshop kick-off meeting.

## 8 Contact Points

The contact points have to be approved on the Kick-Off meeting.

Chairperson: Dr. Volker Stich  
FIR Research Institute for Operations Management  
at RWTH Aachen University  
Pontdriesch 14/16, 52062 Aachen  
Tel.: +49 (0) 241 / 47705-102  
[Volker.Stich@fir.rwth-aachen.de](mailto:Volker.Stich@fir.rwth-aachen.de)