SOA4All

Project Number: **215219**

Project Acronym: **SOA4All**

Project Title: **Service Oriented Architectures for All**

Instrument: **Integrated Project**

Thematic Priority: **Information and Communication Technologies**

D10.6.1. Industrial Showcase

Activity N:	4	
Work Package:	10	
Due Date:		M37
Submission Date:		01/04/2011
Start Date of Project:		01/03/2008
Duration of Project:		36 Months
Organisation Responsible of Deliverable:		ATOS
Revision:		1.0
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Version History

Version	Date	Comments, Changes, Status	Authors, contributors, reviewers
0.1	25.01.2011	Initial outline	Sandra Stinčić Clarke (BT)
0.2	15.02.2011	Updated initial content	Sandra Stinčić Clarke (BT)
0.3	02.03.2011	Updated content	Belen Serrabou (Atos)
0.4	17.03.2011	Produced the Videos and the description	Sven Abels (TIE), Reto Krummenacher (UBIK), Juergen Vogel (SAP), Jacek Kopecky (OU), Alistair Duke (BT), Georgi Pavlov (SAP)
0.5	22.03.2011	Ready for internal review	Emilia Cimpian (Seekda), Jean-Pierre LORRE (EBM)
0.6	28.03.2011	Minor modifications	Belen Serrabou (Atos)
1.0	01.04.2011	Final Version ready to submit	Belen Serrabou (Atos)

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Glossary of Acronyms

Acronym	Definition
C2C	Consumer to Consumer
D	Deliverable
EC	European Commission
ICT	Information and communications technology
KPIs	Key Performance Indicators
R&D	Research and Development
SME	Small and Medium Enterprise
SOA	Service oriented Architecture
SOWER	Sweet is nOt a Wsdl EditoR
SPICES	Semantic Platform for the Interaction and Consumption of Enriched Services
SW	Software
SWEET	Semantic Web sErvice Editing Tool
WP	Work Package
WSDL	Web Services Description Language

Executive summary

SOA4All project results include a set of tutorial videos and demonstrators created to help the uptake of the tools developed and demonstrate the possibilities of technology available. All this material and other commercial-based work has been gathered and displayed in a form of Industrial Showcase, enabling future dissemination and exploitation of the project results.

In total, there are fourteen videos classified in five main categories of material:

1. SOA4All in the Future of Internet of Services video
2. Background tutorial videos
3. Tools and Technologies videos
4. Industrial videos
5. Promotional Material

All the material is already available on: http://www.soa4all.eu/showcase.html

The target audience goes from researchers to public sector, large enterprises or SMEs that want to setup a SOA infrastructure. The general and the background tutorials are aimed especially at beginners and interested outsiders (including persons such as journalists), so they can learn about the research area in which SOA4All was operating. The technology and tool videos show concrete languages and components developed in the project. There are aimed at potential adopters. The Industrial videos are particularly targeted to industrial partners to see concrete examples in the Public Sector, Telecom and eCommerce sectors.

1. Introduction

1.1 Introductory explanation of the deliverable

As the R&D phase of the SOA4All project has finished, the results produced include a set of tutorial videos and demonstrators. The aim of demonstrators is to show the possibilities of technology available, while tutorials are created to help the uptake of the tools developed. This deliverable gathers all those available materials into one repository, explaining the use for each of them. The Industrial Showcase created is available on the SOA4All website enabling future dissemination and exploitation of the project results. All the material is available on: http://www.soa4all.eu/showcase.html

1.2 Purpose and Scope

The purpose of this deliverable is to gather all available tutorials and demonstrators into a coherent repository and present those on the SOA4All website. The deliverable itself is the content already available in the website; this document is only to describe what you can find.

1.3 Structure of the document

Besides the executive summary and the introduction, the document is organised as follows:

- Chapter 2 describes the Industrial Showcase, its available material and targeted audience
- Chapter 3 contains the videos available about:
    - SOA4All in the Future of Internet of Services;
    - Background tutorial videos:
        - Semantics;
        - Linked Data;
        - Services;
    - Tools and Technologies videos:
        - Semantic models;
        - SOA4All Dashboard;
        - SWEET Annotation;
        - SOWER Annotation;
        - Storage and Query (iServe);
        - Composition;
        - Consumption;
        - Human tasks and process/service monitoring;
- Chapter 4 contains the Industrial videos from the use cases:
    - End-user Integrated Enterprise Service Delivery Platform;
    - W21C BT Infrastructure;
    - C2C Service eCommerce;
- Chapter 5 presents the promotional materials:
    - Brochure;
    - Banner;
    - Flyer;
    - Poster;
- Chapter 6 draws conclusions about the overall result.

2. Industrial Showcase

2.1 Description

The aim of the Industrial Showcase is to provide a single point of contact for all industrial oriented materials, such as tutorials and demonstrators developed in the project.

Industrial Showcase is structured as a separate section of the website http://www.soa4all.eu/showcase.html.

2.2 Available Material

This section gives a brief description of the content available in the Industrial Showcase.

In total, there are fourteen videos classified in five main categories of material:

1. SOA4All in the Future of Internet of Services video
2. Background tutorial videos
3. Tools and Technologies videos
4. Industrial videos
5. Promotional Material

2.3 Targeted Audience

For all the videos, the intended audience are researchers and practitioners that want to learn about the results of the SOA4All project. The general and the background tutorials are aimed especially at beginners and interested outsiders (including persons such as journalists), so they can learn about the research area in which SOA4All was operating. The technology and tool videos show concrete languages and components developed in the project. There are aimed for potential adopters. The use case videos describe the three main use cases investigated in the project.

The expected audience for this material is:

- Large industrial organizations or government agencies that want to setup new generation open-source SOA infrastructure;

- Virtual organizations that want to connect large scale heterogeneous service parks coming from different enterprises;

- Services Providers;

- Companies and institutions that are having a SOA infrastructure and/or provide Web services to business partners/end users, and that want to provide discovery and ranking functionalities on top of these services;

- Business Process analysts and modelers with no ICT background who are usually involved on the design and implementation of company processes, large companies and also SME;

- Enterprises: Business Process Management environment;

- Entrepreneurs;

- Public Sector;

- Developers;

- Researchers/Students;

3. SOA4All videos

3.1 SOA4All in the Future Internet of Services

This video describes the current trends in the Future Internet of services and the Web of Data. The project SOA4All considers resources to be services usable via the Service Web. In order to address the current limitations of service computing at Web scale and to lower the entry barrier for the average Web service workers, SOA4all combines Web principles, Web 2.0 technology, context management and semantics into a novel service delivery platform. The applicability of such a platform is manifold, and industrial partners such as SAP, BT and TIE have already demonstrated the benefits of SOA4All technology in the Public Sector, Telecommunications and eCommerce.

The video is available on http://www.soa4all.eu/showcase.html, here it is shown a screenshot.
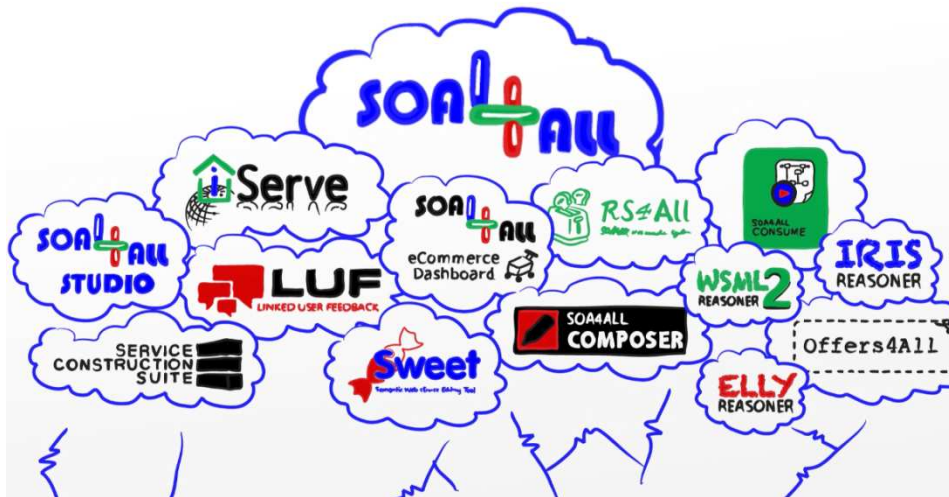
Figure 1: SOA4All in the Future of Internet screenshot

3.2 Background tutorial videos

These three videos serve as a gentle introduction into the general area of semantics and services. They will be particularly useful to beginners and interested outsiders, to learn about the research area in which SOA4All was operating.

All videos are available on the web (http://www.soa4all.eu/showcase.html#background).

1. **Semantics:** This video presents some general ideas of semantics and semantic annotations, and introduction of the RDF as the simplest form of representing the semantic information by John Domingue (OU).
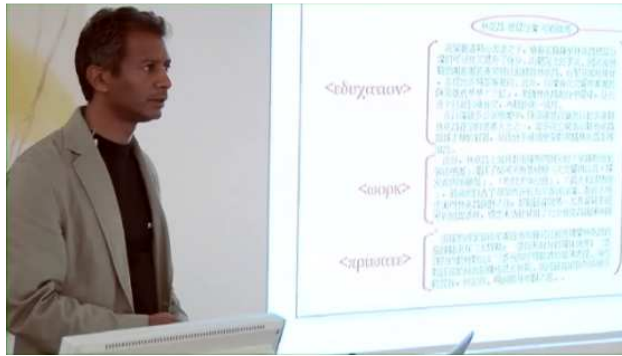
Figure 2: Semantics screenshot

2. **Linked Data:** The Linked Data video contains the description of the key ideas and principles of Linked Data. Linked Data is a movement for making governmental and other public data available in a semantic form where multiple data sources are highly interlinked. The video also shows examples of Linked Data datasets.
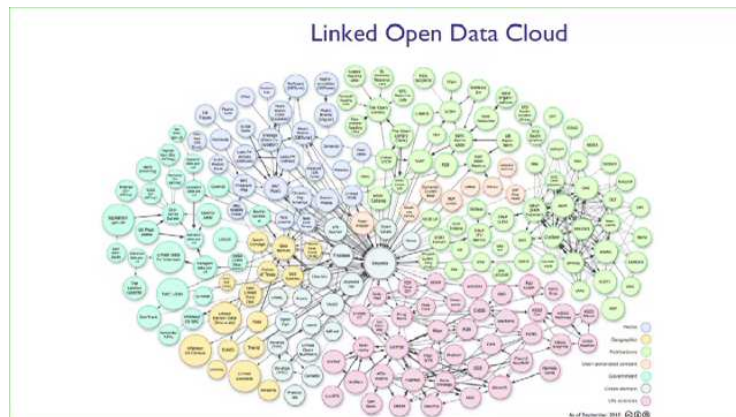
Figure 3: Linked Data screenshot

3. **Services:** Introduction video about services, both in an economic sense, and in a computational sense, and the discussion how semantics can help with the discovery and use of services on the Web, by John Domingue (OU)
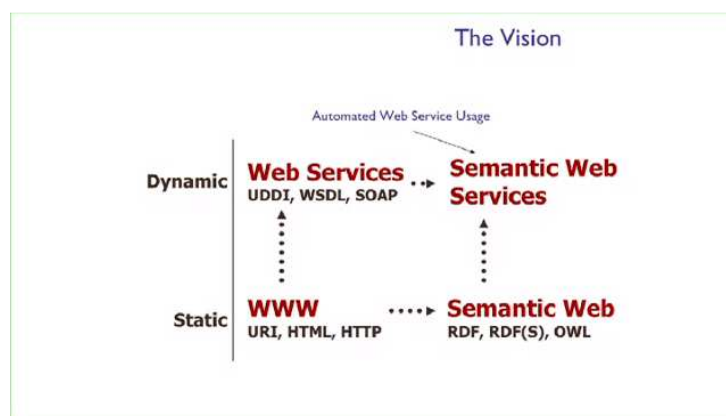
Figure 4: Services screenshot

3.3 Tools and Technologies videos

The technology and tool videos show concrete languages and components developed in the project (http://www.soa4all.eu/showcase.html#toolstech).

1. **Semantic Models:** Explains the languages and models that SOA4All has developed for semantic description of services.
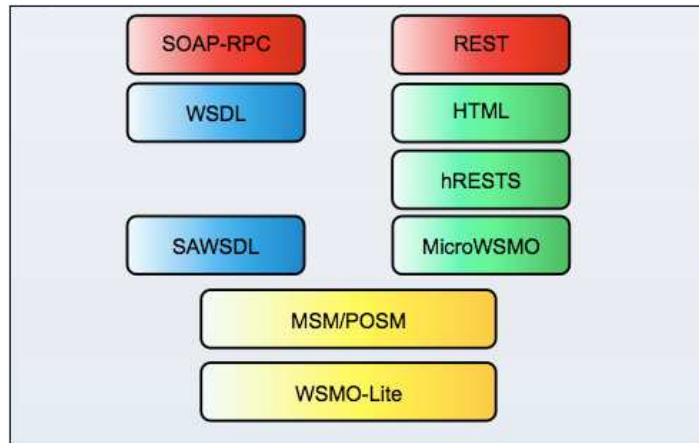
Figure 5: Semantic Models Screenshot

2. **SOA4All Dashboard:** Introduces the main entry point of the integrated SOA4All tools, so that newcomers know where to look for various components.

Figure 6: SOA4All Dashboard Screenshot

3. **A) SWEET Annotation**: Demonstrates how RESTful services and Web APIs are annotated semantically with SWEET.

   B) SOWER Annotation: Demonstrates how WSDL-based business Web services are annotated semantically with SOWER.

4. **Storage and Query (iServe):** Provides a brief guide through the service registry iServe and some of its query capabilities.

5. **Composition:** Introduces the SOA4All service composition tool, with a non-trivial example and several advanced features.
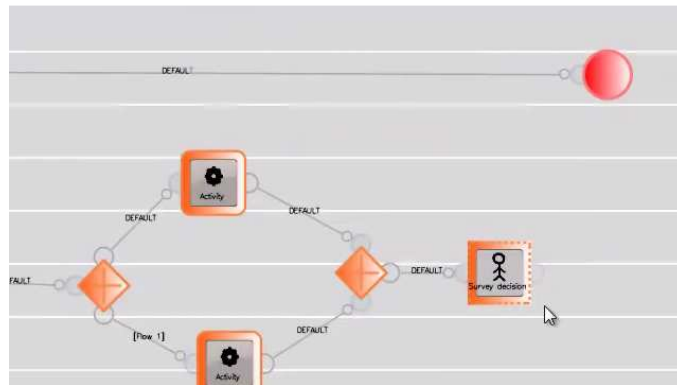
Figure 7: Composition Screenshot

6. **Consumption:** Shows how the SPICES tool can be used to invoke Web services and APIs available through SOA4All. The Semantic Platform for the Interaction and Consumption of Enriched Services (SPICES) is a Web-based tool where end-users can interact with (semantically annotated) services (both WSDL and RESTful) and invoke them in a lightweight manner. More information on http://soa4all.isoco.net/spices/about/

Figure 8: SPICES Screenshot

7. **Human tasks and process/service monitoring:**

The video aims to show:

- The Execution Engine, in particular the possibility of executing processes including both Web Services and human tasks

- The Process Monitoring Dashboard

The scenario implemented supports civil servants in handling typical administrative processes. They can model, execute and monitor such processes using SAP enterprise services that provide rich business functionality.
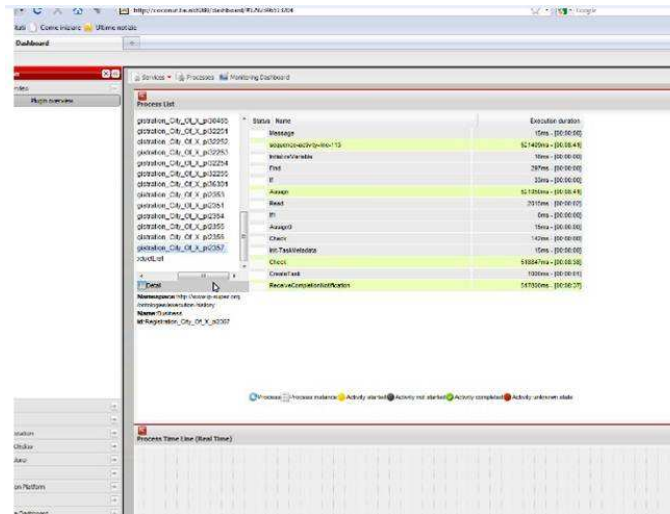
Figure 9: Monitoring screenshot

4. Industrial videos

The industrial videos describe the three main use cases investigated in the project: Public Sector, Telecom and eCommerce (http://www.soa4all.eu/showcase.html#usecases).

4.1 End-user Integrated Enterprise Service Delivery Platform

In the video, it is shown how SOA4All technology can support civil servants to model administrative processes: starting from the SOA4All composer, civil servants (and other business users) can model and execute administrative procedures (and other business processes) based on semantic Web services. In our example, the civil servant wants to handle a survey among selected citizens in order to gather feedback for a planned road construction. But when modelling such a process, civil servants are primarily not interested in
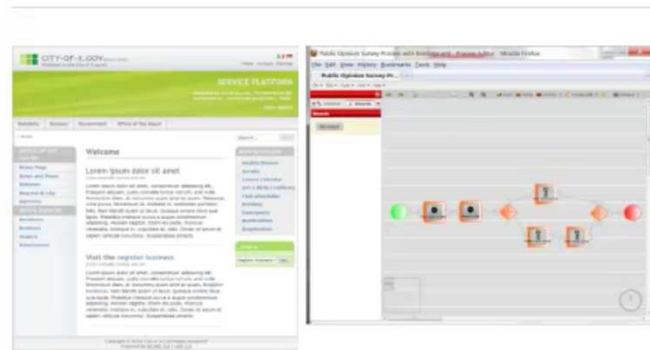
Figure 10: Public Sector Screenshot

the technical details of certain Web services such as the interface definition with parameters and data types. Rather, for such users the business aspects associated with a certain service are relevant, e.g., its pricing model, service quality, or security level. Thus, we have developed a modeling wizard that allows the civil servant to specify such business requirements in the form of Key Performance Indicators (KPIs) for the business process at hand. Then, the best Web services with respect to these KPIs are selected automatically by SOA4All so that the overall process is optimal.

Specific Target Audience

- Public sector (i.e., public administrations such as city halls or tax offices).

4.2 W21C BT Infrastructure

This video is a demonstrator of the Offers4All scenario, the service that allows companies e.g. retail organisations, entertainment providers, travel/hotel companies to advertise offers to subscribers of the service. These offers might be "last-minute" travel or entertainment deals or predefined campaign offers from retail organisations. The Offers4All service allows an offer provider to create a new offer by describing what the offer is and who and how many people it wants to target with the offer. An appropriate set of subscribers are then chosen and are made aware of the offer via a communication channel. Offer providers pay to use the service (several possible charging models) but subscribers do not.

Figure 11: W21C BT
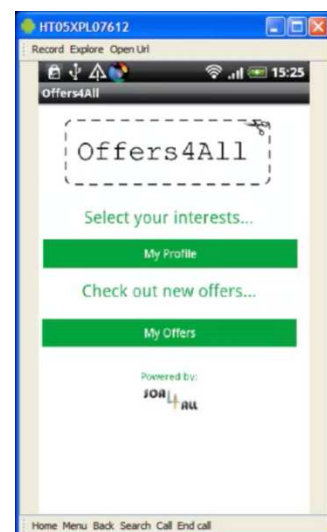
Infrastructure video screenshot
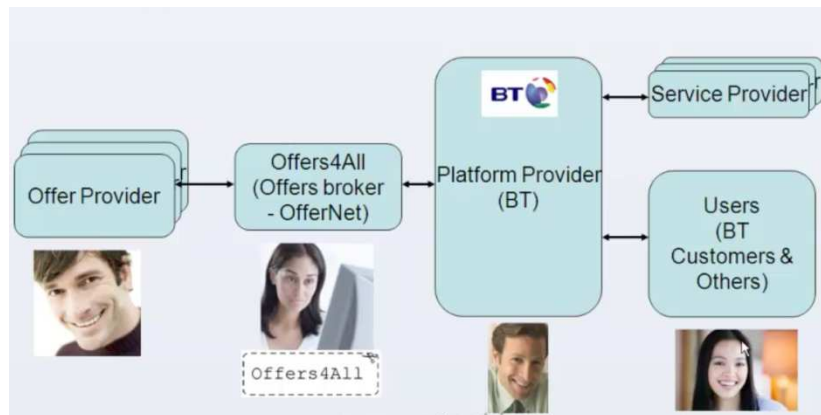
Figure 12: W21C BT Infrastructure scenario

Specific Target Audience

- End users who are interested in the possibility of creating web applications and mash-ups using Telco services, for personal use or to share with friends;

- Business focused users who see the opportunity to either resell BTs services, or integrate online Telco features into a current business;

- Telcos (to use the platform as their own);

- Service providers.

4.3   C2C Service eCommerce

This demo will demonstrate how SOA4All can help with empowering eCommerce processes and with integrating various services into eCommerce processes. It will provide an insight of the SOA4All tools and the eCommerce Dashboard. The SOA4All eCommerce solutions allow webshop providers to combine offers from many different vendors on the fly.

Figure 13: C2C Service eCommerce screenshot

This means that sellers can integrate products from many business partners easily without having to care about importing and exporting issues.
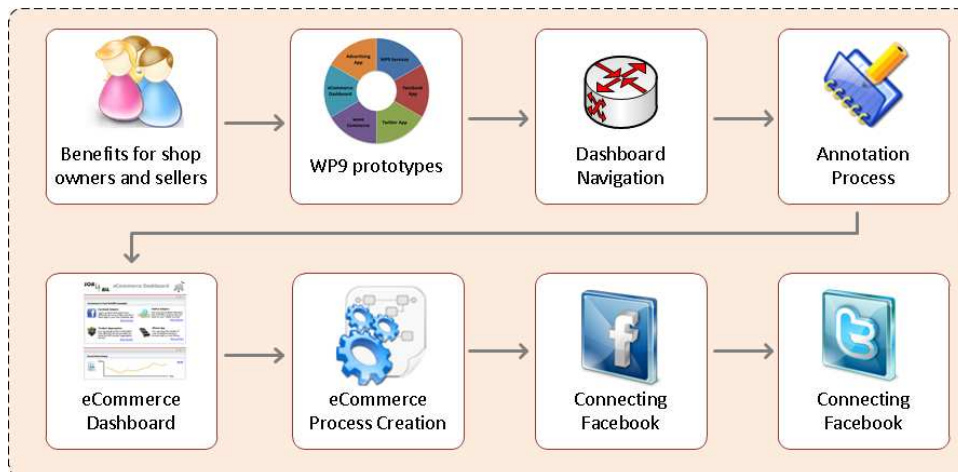
Figure 14: eCommerce Workflow

Specific Target Audience

- All companies that are interested in e-Commerce with a special focus on SMEs;

- Webshop providers and resellers;

- eCommerce application developers.

5. Promotional materials

The Industrial Showcase page is a single point of contact for interested persons to know about SOA4All results. For this reason, the link to the promotional materials developed for the project is included, which includes a brochure, banner, flyer and poster (http://www.soa4all.eu/file-upload.html?func=select&id=3).

Figure 15: SOA4All Brochure inside

Figure 16: SOA4All Brochure outside

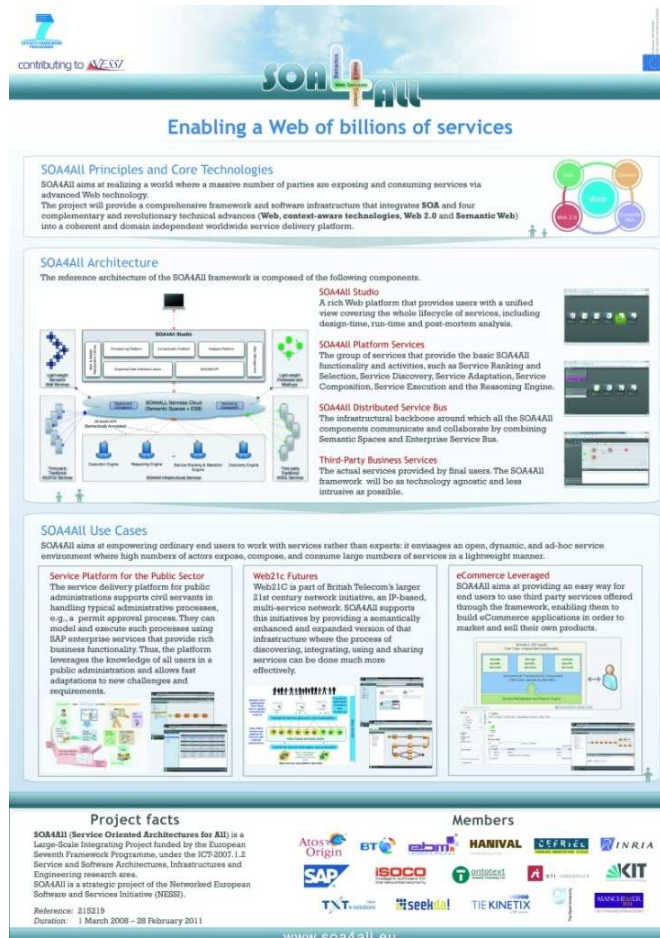*Figure 17: SOA4All banner*

Figure 18: SOA4All flyer

Figure 19: SOA4All poster

6. Conclusions

This deliverable has produced a single point of contact for all promotional materials, tutorials and demonstrators developed in the project. Everybody interested in the SOA4All results can access a single page to gain general knowledge of the SOA4All assets and how to use them. It contains from background semantic and linked data videos to how to use concrete tools developed in the project and thus it is addressed to wide spectrum of audience.

The materials have been produced in a high-quality format and are accessible in different formats. It is already available for all target users interested in the SOA4All solution on the web: http://www.soa4all.eu/showcase.html