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 Thematic Priority: **Information and Communication Technologies**

D12.3.2 First Update of the SOA4All Website with SOA4All Technology

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PP	Restricted to other programme participants (including the Commission)	
RE	Restricted to a group specified by the consortium (including the Commission)	
CO	Confidential, only for members of the consortium (including the Commission)	

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Glossary of Acronyms

Acronym	Definition
CMS	Content Management System
D	Deliverable
EC	European Commission
EU	European Union
HTML	HyperText Markup Language
hRESTS	HTML format for describing RESTful Services
NESSI	Networked European Software & Services Initiative
RDF	Resource Description Framework
RDFa	Resource Description Framework - in - attributes
SOA	Service Oriented Architecture
URL	Uniform Resource Locator
WP	Work Package
WSMO	Web Services Modeling Ontology

Executive summary

The deliverable describes the structure of the SOA4All Website at month 12 of the project, as well as how the project has been using SOA4All technologies to improve the possibility of navigating and discovering information in the Website.

1. Introduction

1.1 Introductory explanation of the deliverable

This document describes the main functionalities added to the SOA4All Website [9] since month 3 of the project, together with other kind of changes in contents or technologies used by the Website. In particular, since the SOA4All Website will incrementally use some of the technologies developed in the project, current status on this subject is presented and a preliminary plan for the adoption of SOA4All technologies is provided.

The actual deliverable D12.3.1 is the Website itself. This document is intended as a complement to the Website in order to describe its current status at month 12.

1.2 Structure of the document

The document is structured as follows. Section 2 illustrates the current structure of the Website and describes some changes that were implemented during the first year of the project (e.g., as for its URL and Joomla! configuration). Section 3 describes the use of SOA4All technologies in the Website (including a plan of future tasks). Section 4 draws some conclusions.

2. SOA4All Website

This section illustrates the structure of the Website at month 12 of the project, describing in particular each of the sections currently forming the Website and the related content.

2.1 Appearance and structure at month 12

The SOA4All public Website is structured in the following sections:

- **Home:** it is the front page of the Website, and it includes several elements such as the main navigation menu, a “welcome” article, the latest news and documents published, a search form etc.
- **Project:** this section describes the main facts of the project, including the description of the work plan.
- **Consortium:** this section lists the SOA4All participants, with their logos, short descriptions and links to their Websites.
- **Knowledge:** this section gives information about the baseline technologies and main principles of SOA4All.
- **Glossary:** this section illustrates the SOA4All glossary, an evolution of the one defined in D1.1.1 [10].
- **Resources:** this section makes available for download different project resources, such as public deliverables, scientific publications, presentations, publicity material.
- **News:** this section lists and describes news and events related to SOA4All.
- **Links:** this section lists and organizes links to other relevant Websites related to SOA4All (e.g., European projects and initiatives).
- **Contact:** this section shows contact information for the project (i.e., the vCard of the project coordinator).
- **Community:** this section includes links to SOA4All groups on social networks; photos taken during some SOA4All meetings.

Some sections of the Website are described in more detail in the remainder of this section.

Pages with frequently updated contents (e.g., homepage, news, resources, links) have a feed (both RSS 2.0 and Atom).

Moreover, it is possible to transform each page in PDF format, in printable format and to send the related link by email.

A log of comments received about the Website and a list of action items derived from them (with the corresponding level of accomplishment) is maintained on the project Wiki [14].

2.1.1 Home page

The main contents of the project home page (see Figure 1) are:

- A “welcome” article, i.e., a very short description of the project with links to more detailed contents present in other sections of the Website.
- Relevant news: full text of the latest two news in chronological order related to the

project. News are contributed by project partners through the project mailing lists.

- The form for keyword based search.
- The EU logo, the 7th Framework Programme logo, the contributing to NESSI logo.
- The seekda! crawler picture, dynamically updated from the seekda! Website [11], showing a graph with the increasing number of publicly available web services.
- The short list of the latest news published (only titles, linking to the full text version published in the News section).
- The short list of the latest new documents, e.g., deliverables, publications contributed by project partners and published to the Website as they become available (only titles, linking to the full text version published in the Resources section).



The screenshot shows the SOA4All website home page. The header features the SOA4All logo with 'Semantics', 'Web Services', 'Web 2.0', and 'Context' labels, and the tagline 'A Web of billions of services'. A navigation menu includes Home, Project, Consortium, Knowledge, Glossary, Resources, News, Links, Contact, and Community. The main content area has a 'Welcome to SOA4All' heading and a search bar. Below the search bar are logos for the European Union and the Seventh Framework Programme, along with the text 'contributing to NESSI'. A statistics box displays '27.813 services' and a graph showing an increasing trend, with the text 'powered by seekda!'. The footer of the page lists links for 'Read more about SOA4All': Project overview, Consortium, Core technologies and use cases, Glossary, Work plan, and Available resources (deliverables, publications etc.).

Figure 1 – Home page

2.1.2 Project

The Project section includes:

- Overview: a short description of the SO4All project.
- Work Plan (see Figure 2): describes how the project is organized in activities and work packages.



A Web of billions of services

Home
Project
Consortium
Knowledge
Glossary
Resources
News
Links
Contact
Community

Work Plan

A1 Fundamental and Integration Activities	A2 Core R&D Activities
WP1 SOA4All Runtime	WP3 Service Annotation and Reasoning
WP2 SOA4All Studio	WP4 Service In Context
	WP5 Service Location
	WP6 Service Construction
A3 Use Case Activities	A4 exploitation and Impact Activities
WP7 End-user Integrated Enterprise Service Delivery Platform	WP10 Exploitation
WP8 BT W21C	WP11 Standardisation
WP9 C2C eCommerce	WP12 Dissemination
	WP13 Training
A5 Management Activities	
WP14 Project Management	

SOA4All




contributing to *NESS*

Related Articles

Overview

Work Plan

Overview of clustered work packages

Figure 2 – Work plan page

2.1.3 Consortium

The Consortium page (see Figure 3) lists the project participants' names and logos (each linking the corresponding partner's Website). Logos appear also on the EU map (realized as a Google Maps mash-up) with a short description of each partner as taken from their Website.

Home
Project
Consortium
Knowledge
Glossary
Resources
News
Links
Contact
Community

Consortium

Atos Origin Spain	British Telecommunications United Kingdom	Open University United Kingdom	SAP AG Germany
CEFRIEL Italy	University Innsbruck Austria	EBM WebSourcing France	Hanival Internet Services GmbH Austria
Universitaet Karlsruhe Germany	INRIA France	Intelligent Software Components Spain	Ontotext Lab Bulgaria
Seekda OG Austria	TIE Nederlands	TXT e-Solutions SpA Italy	The University of Manchester United Kingdom

SOA4All

contributing to

Figure 3 – Consortium page

2.1.4 Knowledge

The Knowledge section (see Figure 4) describes SOA4All core technologies and use cases. It shows an introduction about SOA4All principles and is structured in subsections with more detailed contents as follows:

- Service Oriented Architecture
- Context Management
- Web Principles
- Web 2.0
- Semantic Technologies
- End-user Integrated Enterprise Service Delivery Platform (WP7 use case)
- BT Web21c Futures (WP8 use case)
- eCommerce Leveraged (WP9 use case)

Knowledge

SOA4All Principles

SOA4All will help to realize a world where a massive number of parties expose and consume services via advanced Web technology. The outcome of the project will be a framework and software infrastructure that will integrate SOA and four complementary and revolutionary technical advances (the Web, context-aware technologies, Web 2.0 and Semantic Web) into a coherent and domain independent worldwide service delivery platform.

Incorporating Web principles into SOA

SOA4All aims at transforming service-oriented environments into architectures of billion of services. With this purpose it will integrate the principles which made the Web such a successful platform for the worldwide sharing of content. SOA4All seeks that everybody could be able participate either as a provider or consumer of information beyond the boundaries of enterprises, meaning that different roles will be made possible depending on the circumstances, and also means that the provisioning and modification of services must be under the distributed control of peers rather than being controlled by a central authority.

Incorporating context into SOA

SOA4All will incorporate context in SOA as a means to customize service usage and provisioning on a worldwide scale, customizing the consumption of a service from the user perspective and from the provider expectations. The mix of semantic and context technologies in the SOA4All infrastructure will be a key enabler of dynamic adaptation of services to their context of use. To facilitate the deployment of semantic services on a global scale, context will cover a series of aspects ranging from system and location information to social settings and legal regulations.

Incorporating Semantic Web into SOA

Service operations such as discovery, selection, composition, mediation and invocation in a world of numerous services need an advanced as self-managed as possible infrastructure. In order to achieve this we need to provide semantic descriptions for Web Services at many different levels, the creation of service locators based upon these descriptions and the creation of grounding mechanisms for invoking these services. It is important that all of these descriptions and services are tied together, allowing for seamless and dynamic location and invocation of Semantic Web Services.

Incorporating Web 2.0 into SOA

SOA4All will make use of Web 2.0 technology as means to generate and access the semantic service layer. Properly including human interaction and cooperation will enable us to provide solution to certain tasks such as service ranking or mediation that remain otherwise unfeasible. Web 2.0 and human computing approaches together with their underlying social consensus building mechanisms have

SOA4All
search

contributing to

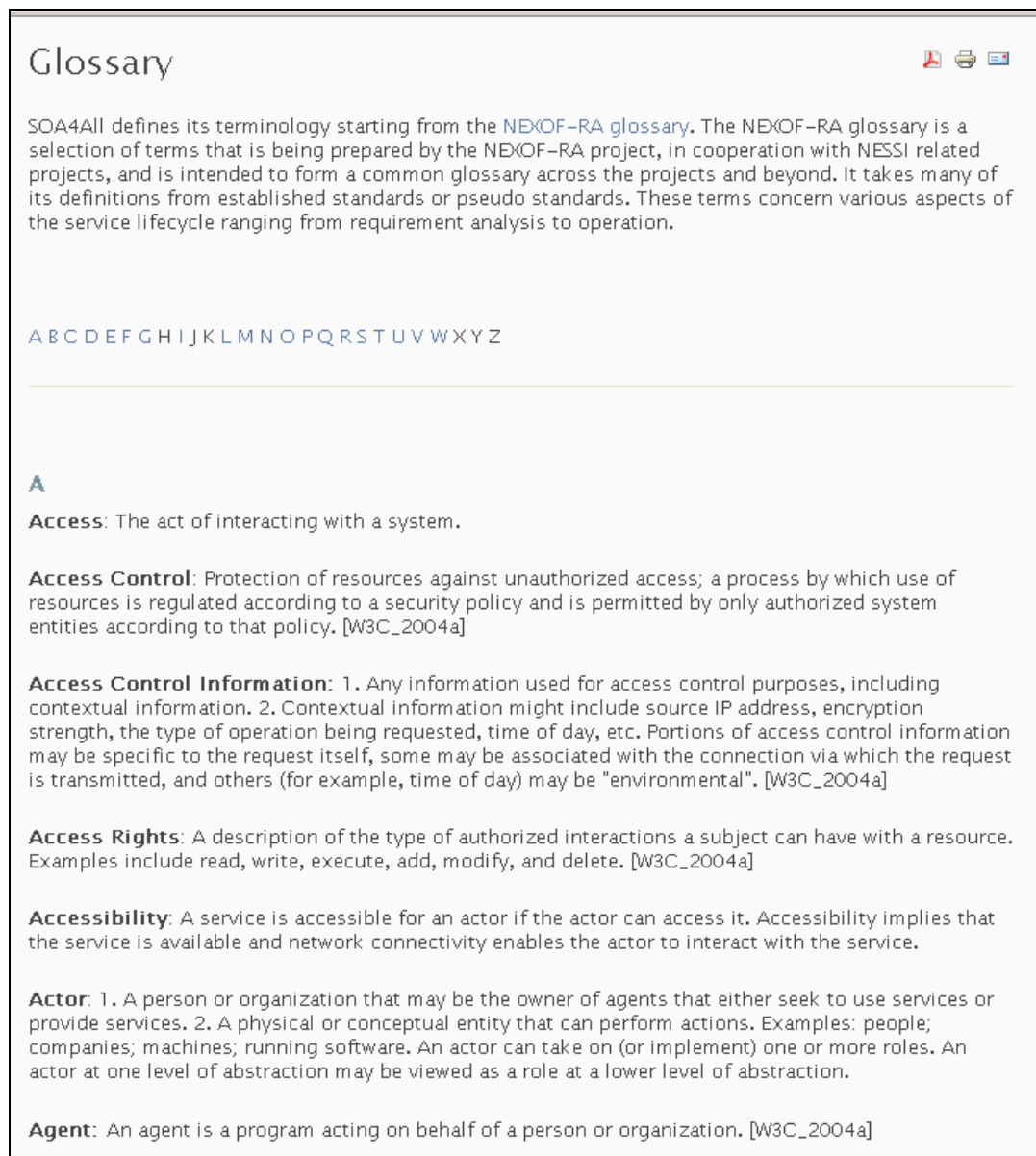
Knowledge

- Service Oriented Architecture
- Context Management
- Web Principles
- Semantic Technologies
- Web 2.0
- End-user Integrated Enterprise Service Delivery Platform
- BT Web21c Futures
- eCommerce Leveraged

Figure 4 – Knowledge page

2.1.5 Glossary

This section contains the SOA4All glossary of terms (see Figure 5), which is based on the NEXOF-RA one [12]. The version currently published is the one defined in D1.1.1. The SOA4All glossary will be updated and extended by project partners (WP1 partners in particular) during the project lifespan.



The screenshot shows a web page titled "Glossary" with a search bar and navigation icons. The main content area contains an introductory paragraph and a list of terms under the letter 'A'. The terms are: Access, Access Control, Access Control Information, Access Rights, Accessibility, Actor, and Agent. Each term is followed by a definition and a reference to W3C_2004a.

Glossary

SOA4All defines its terminology starting from the [NEXOF-RA glossary](#). The NEXOF-RA glossary is a selection of terms that is being prepared by the NEXOF-RA project, in cooperation with NESSI related projects, and is intended to form a common glossary across the projects and beyond. It takes many of its definitions from established standards or pseudo standards. These terms concern various aspects of the service lifecycle ranging from requirement analysis to operation.

ABCDEFGHIJKLMNOPQRSTUVWXYZ

A

Access: The act of interacting with a system.

Access Control: Protection of resources against unauthorized access; a process by which use of resources is regulated according to a security policy and is permitted by only authorized system entities according to that policy. [W3C_2004a]

Access Control Information: 1. Any information used for access control purposes, including contextual information. 2. Contextual information might include source IP address, encryption strength, the type of operation being requested, time of day, etc. Portions of access control information may be specific to the request itself, some may be associated with the connection via which the request is transmitted, and others (for example, time of day) may be "environmental". [W3C_2004a]

Access Rights: A description of the type of authorized interactions a subject can have with a resource. Examples include read, write, execute, add, modify, and delete. [W3C_2004a]

Accessibility: A service is accessible for an actor if the actor can access it. Accessibility implies that the service is available and network connectivity enables the actor to interact with the service.

Actor: 1. A person or organization that may be the owner of agents that either seek to use services or provide services. 2. A physical or conceptual entity that can perform actions. Examples: people; companies; machines; running software. An actor can take on (or implement) one or more roles. An actor at one level of abstraction may be viewed as a role at a lower level of abstraction.

Agent: An agent is a program acting on behalf of a person or organization. [W3C_2004a]

Figure 5 – Glossary page

2.1.6 Resources

The Resources section contains the SOA4All downloadable resources, such as deliverables, publications, and publicity material (Figure 6).

The page is annotated using RDFa [1] and hRESTS [2], as described in Section 3.



The screenshot shows the SOA4All website's Publications page. The main content area lists several publications with their titles and authors. On the right, there is a sidebar with a search bar, the SOA4All logo, and a list of resource categories: All resources, Deliverables, Publications, and Publicity material. At the bottom, there is a footer with a Creative Commons Attribution 3.0 license and a note about the repository technology.

SOA4All
search

Publications

Order by: Title | Author

Hausheer D., Ristol Jorba S. et al **Future Internet Socio-Economics – Challenges**

Heymans S., Toma I. **Ranking Services using Fuzzy Hex Programs**. Book: "Proceedings of the 2nd International Conference on Web Reasoning and Rules Systems (RR 2008)"

Kopecký J., Simperl E. **Semantic Web Service Offer Discovery for E-commerce In ICEC '08: Proceedings of the 10th international conference on Electronic commerce, volume 342, pages 1–6, New York, NY, USA, 2008. ACM**

Domingue, J., Fensel D., González-Cabero **SOA4All, Enabling the SOA Revolution on a World Wide Scale**. Proceeding of the 2nd IEEE International Conference on Semantic Computing, August 2008

Vitvar T., Kopecký J., Viskova J. and Fensel D. **WSMO-Lite Annotations for Web Services**. ESWC 2008: 674–689

Kopecky J., Vitvar T. **WSMO-Lite: Lowering the Semantic Web Services Barrier with Modular and Light-Weight Annotations** icsc, pp.238–244, 2008 IEEE International Conference on Semantic Computing, 2008

Search Repository Submit File

SOA4All Resources service API
Operation `getDocument`
Invoked using the GET at `http://www.soa4all.eu/resources.html?func=startdown&(id)`
Parameters: id the identifier of the particular document
Output value: document download page

Remository 3.44.2 is technology by Black Sheep Research

Site map | Validate CSS | Validate XHTML | User Access

Except where otherwise noted, content on this site is licensed under a Creative Commons Attribution 3.0 Unported License.

Figure 6 – Publications page

2.1.7 Search

In each page of the Website a search form is available. The form allows keyword search both in documents (i.e., descriptions of items published in the Resources section) and HTML pages. Figure 7 shows an example of search results.

Search

Search Keyword:

All words Any words Exact Phrase

Ordering: ▼

Search Only: Remository Articles Web Links Contacts Categories Sections News Feeds

Search Keyword **SOA**

Total: 23 results found.

Page 1 of 2 Display # ▼

- Glossary**
(SOA4All/Technology)
SOA 4All defines its terminology starting from the NEXOF-RA glossary. The NEXOF-RA glossary is a selection of terms that is being prepared by the NEXOF-RA project, in cooperation with NESSI related projects, ...
Friday, 20 February 2009
- Web 2.0**
(SOA4All/Technology)
... They are also means to balance the integration of services with the interactions provided by humans. SOA 4All will make use of Web 2.0 technology in its user interfaces. Web 2.0 has been becoming one of ...
Wednesday, 18 February 2009
- Semantic Technologies**
(SOA4All/Technology)
... resource, but "online" does not entail scalable. Currently SOA is largely still an enterprise specific solution exploited by and located within corporations, their supply chains, and internal communication ...
Monday, 16 February 2009
- SOA4All Plenary Meeting**
(SOA4All/News)
The third plenary meeting of the SOA 4All project took place in Innsbruck from the 11th to the 13th of February 2009. The meeting was hosted by STI Innsbruck. ...
Tuesday, 10 February 2009
- BT Web21c Futures**
(SOA4All/Use cases)

Figure 7 – Search results page

2.2 URL

The initial URL of the site was <http://www.soa4all.org>. It has been moved to <http://www.soa4all.eu> in accord to the guidelines from the EC.

For backward compatibility, users accessing the old URL are automatically redirected to the new one.

2.3 Joomla! upgrade

The SOA4All Website has been constructed on top of Joomla!, currently one of the most widespread free open source CMSs. For further information about Joomla! and how it has been configured to support SOA4All Website, see deliverable D12.3.1 “Initial SOA4All Website”.

During the first year of the project the Joomla! Installation was updated to the version “1.5.8 Production/Stable 10-November-2008”. This patch increased the security as well as the functionality of the CMS. For further information, see the release notes for Joomla 1.5.8 [12].

3. Use of SOA4All technologies in the SOA4All Website

SOA4All aims at developing a framework and a software infrastructure that will bring SOA to the global scale. The main results of SOA4All will be:

1. Lightweight versions of existing semantic service descriptions frameworks, e.g. WSMO Lite and MicroWSMO.
2. The Service Crawler that enable intelligent retrieval of services on the Web.
3. The Service Discovery prototype that implements a lightweight approach for service discovery.
4. The Service Ranking prototype for ordering services and then identifying the best fit.
5. The Composition Framework for the design and execution of lightweight, context-aware business processes.
6. The SOA4All Studio for providing an usable service platform following Web 2.0 principles for service consumption and service provisioning.
7. The SOA4All Runtime composed of a distributed service bus, for accessing and coordinating services at Web scale, and a semantic space, which provides a Web-like publish and subscribe mechanism for data exchange.

The thing that most obviously lends itself to being used for the site is the lightweight service description framework [1]. This is described in detail in Section 3.1.

As for the other results, they will be visible on the Website at least in the form of screencasts. As for the SOA4All tools with a Web interface, the possibility to add them to the Website and make them accessible through it will be assessed.

3.1 Use of SOA4All lightweight service description framework in the SOA4All Website

The objectives of the use of SOA4All lightweight service description framework in the SOA4All Website are:

- annotating the resources available on a web site with semantic data to enable the navigations of the Web through semantic clients,
- make the RESTful services offered by Remository [3] (a Joomla! extension for file and document management) available for discovery and composition by the SOA4All Studio and possibly by the SOA4All Runtime.

In fact, one of the main objectives of SOA4All is to build on prior research and Web standards for ontologies such as OWL [7] and WSMO [8] and to provide lightweight versions of existing semantic description frameworks like WSMO-Lite [5] and MicroWSMO [6].

MicroWSMO is a microformat based on another microformat called hRESTS [2] (HTML for RESTful Services) for machine-readable descriptions of Web APIs, and backed by a simple service model based on WSMO that makes it easy for creators of Web 2.0 sites to annotate their resources, so that the WSMO framework and SOA4All can make use of them.

Both hRESTS and MicroWSMO can be used in conjunction with the RDFa syntax. RDFa is a way to embed RDF-based annotation into existing Web pages. RDFa is a syntax that expresses structured data using a set of elements and attributes that embed RDF in HTML. An important goal of RDFa is to embed RDF data without repeating existing HTML content when that content *is* the structured data.

The SOA4All Website will promote the SOA4All vision by showcasing and adopting SOA4All technologies. E.g., semantic annotations will allow for more usable services. In the Website the MicroWSMO description framework will be incrementally used, while the framework is being developed.

At **Month 6** use of RDFa for embedding RDF descriptions of downloadable resources in the HTML pages created by Remository was implemented. At **Month 12** use of hRESTS for embedding RDF descriptions of Remository functionalities in the HTML pages created by Remository itself was in place. The plan for the use of the MicroWSMO framework within the SOA4All Website is the following.

Month 12: Use of hRESTS for embedding RDF descriptions of Remository functionalities in the HTML pages created by Remository itself.

Month 24: At month 12 the deliverable D3.4.3 “MicroWSMO – Defining the first version of MicroWSMO based on Microformats and RDFa” will be released. In this deliverable, a first version of MicroWSMO will be developed by simplifying WSMO to obtain MicroWSMO, a language where sub-polynomial reasoning can be achieved. This deliverable will describe the syntax and semantics of the language MicroWSMO. During the second year of the project the MicroWSMO layer will be added on top of the hRESTS descriptions already realized and the descriptions to other components of the website will be extended.

Month 30: At month 24 the deliverable D3.4.6 “MicroWSMO v2 – Defining the second version of MicroWSMO as a systematic approach for rich tagging” will be realized with a new version of MicroWSMO. This second version will be more expressive than the first, thus enabling richer tagging of Web services. By month 30 all the descriptions will be enriched using this second version of the framework.

Within the SOA4All Website, there are some services that do not use WSDL for interface description. Instead, microformats can be used to annotate the service data. One of these services is the resources download service. We extended Remository in order to generate HTML pages including RDFa annotations of downloadable resources, and to embed RDF descriptions of Remository functionalities in the HTML pages created by Remository itself. An example of RDFa annotations of documents description is shown in the Figure 8. A sample RDFa/hRESTS annotation of the resources download service description is reported in Figure 9. Figure 10 reports the RDF document extracted from the “publications” page of the SOA4All Website on February 23rd.

```
<div id='remositoryfilelisting'>
  <div xmlns:dc="http://purl.org/dc/elements/1.1/"
    xmlns:foaf="http://xmlns.com/foaf/0.1/"
    xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
    xmlns:rdfrev="http://www.purl.org/stuff/rev#">
    <table>
      <tr>
        <td>
          <h5 resource="/resources.html?func=startdown&id=36">
            <span property="dc:creator">Hausheer D., Ristol Jorba S. et al</span>
            <a class='eventlistmod' href="/resources.html?func=startdown&id=36">
              <span property="dc:title">Future Internet Socio-Economics – Challenges</span>
            </a>
            <span property="dc:description"> FIA event (Madrid, Spain. December'08</span>
          </h5>
        </td>
      </tr>
    </table>
  </div>
</div>
```



```

    </td>
  </tr>
  ...
</table></div></div>

```

Figure 8 – Sample RDFa annotation of a publication

```

<div typeof="wsl:Service" about="#svc"
xmlns:hr=http://www.wsmo.org/ns/hrests#
xmlns:wsl=http://www.wsmo.org/ns/wsmo-lite#
xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#">
<span property="rdfs:label">SOA4All Resources</span> service API
  <div rel="wsl:hasOperation">
    <span typeof="wsl:Operation" about="#op1">Operation
      <code property="rdfs:label">getDocument</code>
      <p> Invoked using the
        <span property="hr:hasMethod">GET</span>
        at <code property="hr:hasAddress" datatype="hr:URITemplate">
http://www.soa4all.eu/resources.html?func=startdown&{id}</code><br/>
<span rel="wsl:hasInputMessage"><span typeof="wsl:Message">
<strong>Parameters:</strong><code>id</code> the identifier of the particular document</span></span><br/>
<span rel="wsl:hasOutputMessage"><span typeof="wsl:Message">
<strong>Output value:</strong> document download page</span>
</span></p></span></div></div>

```

Figure 9 – Sample RDFa annotation of the document download service description

```

<?xml version="1.0" encoding="utf-8"?>
<rdf:RDF
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:foaf="http://xmlns.com/foaf/0.1/"
  xmlns:hr="http://www.wsmo.org/ns/hrests#"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rdfrev="http://www.purl.org/stuff/rev#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
  xmlns:wsl="http://www.wsmo.org/ns/wsmo-lite#"
  xmlns:xhv="http://www.w3.org/1999/xhtml/vocab#"
  xmlns:xml="http://www.w3.org/XML/1998/namespace"
>
  <wsl:Service rdf:about="http://www.soa4all.eu/resources.html#svc">
    <rdfs:label xml:lang="en">SOA4All Resources</rdfs:label>
    <wsl:hasOperation>
      <wsl:Operation rdf:about="http://www.soa4all.eu/resources.html#op1">
        <wsl:hasInputMessage>

```

```
<wsl:Message/>
</wsl:hasInputMessage>
<wsl:hasOutputMessage>
  <wsl:Message/>
</wsl:hasOutputMessage>
  <hr:hasAddress
rdf:datatype="http://www.wsmo.org/ns/hrests#URITemplate">http://www.soa4all.eu/resources.html?func=startdown&id}</hr:hasAddress>
  <rdfs:label xml:lang="en">getDocument</rdfs:label>
  <hr:hasMethod xml:lang="en">GET</hr:hasMethod>
</wsl:Operation>
</wsl:hasOperation>
</wsl:Service>
<rdf:Description rdf:about="http://www.soa4all.eu/resources.html?func=startdown&id=40">
  <dc:description xml:lang="en">Book: "Proceedings of the 2nd International Conference on Web Reasoning and Rules Systems (RR 2008)"</dc:description>
  <dc:title xml:lang="en">Ranking Services using Fuzzy Hex Programs.</dc:title>
  <dc:creator xml:lang="en">Heymans S., Toma I.</dc:creator>
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<rdf:Description rdf:about="http://www.soa4all.eu/resources.html?func=startdown&id=34">
  <dc:description xml:lang="en">Proceeding of the 2nd IEEE International Conference on Semantic Computing, August 2008</dc:description>
  <dc:title xml:lang="en">SOA4All, Enabling the SOA Revolution on a World Wide Scale.</dc:title>
  <dc:creator xml:lang="en">Domingue, J., Fensel D., González-Cabero</dc:creator>
</rdf:Description>
<rdf:Description rdf:about="http://www.soa4all.eu/resources.html">
  <xhv:icon rdf:resource="http://www.soa4all.eu/templates/jjbeautifulday/favicon.ico"/>
  <xhv:icon rdf:resource="http://www.soa4all.eu/images/favicon.ico"/>
  <xhv:stylesheet rdf:resource="http://www.soa4all.eu/templates/jjbeautifulday/css/template_css.css"/>
  <xhv:stylesheet rdf:resource="http://www.soa4all.eu/components/com_remository/remository.css"/>
  <xhv:alternate rdf:resource="http://www.soa4all.eu/resources.html?func=rss&id=21&no_html=1"/>
  <xhv:license rdf:resource="http://creativecommons.org/licenses/by/3.0"/>
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<rdf:Description rdf:about="http://www.soa4all.eu/resources.html?func=startdown&id=36">
  <dc:description xml:lang="en"></dc:description>
  <dc:title xml:lang="en">Future Internet Socio-Economics – Challenges</dc:title>
  <dc:creator xml:lang="en">Hausheer D., Ristol Jorba S. et al</dc:creator>
</rdf:Description>
<rdf:Description rdf:about="http://www.soa4all.eu/resources.html?func=startdown&id=41">
  <dc:description xml:lang="en">In ICEC '08: Proceedings of the 10th international conference on Electronic commerce, volume 342, pages 1–6, New York, NY, USA, 2008. ACM</dc:description>
  <dc:title xml:lang="en">Semantic Web Service Offer Discovery for E-commerce</dc:title>
  <dc:creator xml:lang="en">Kopecký J., Simperl E.</dc:creator>
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  <dc:description xml:lang="en">ESWC 2008: 674-689</dc:description>
  <dc:title xml:lang="en">WSMO-Lite Annotations for Web Services.</dc:title>
  <dc:creator xml:lang="en">Vitvar T., Kopecký J., Viskova J. and Fensel D.</dc:creator>
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<rdf:Description rdf:about="http://www.soa4all.eu/resources.html?func=startdown&id=42">
  <dc:description xml:lang="en">icsc,pp.238-244, 2008 IEEE International Conference on Semantic Computing, 2008</dc:description>
  <dc:title xml:lang="en">WSMO-Lite: Lowering the Semantic Web Services Barrier with Modular and Light-Weight Annotations</dc:title>
  <dc:creator xml:lang="en">Kopecky J., Vitvar T.</dc:creator>
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Figure 10 – Example of RDF extracted from the publications page

4. Conclusions

This document described the structure of the SOA4All Website. The main functionalities added to the Website were also described, together with other changes in contents or technologies used. The Website will promote the SOA4All vision by showcasing and adopting SOA4All technologies. E.g., semantic annotations will allow for more usable services. The plan for the incremental use of some SOA4All technologies (the MicroWSMO framework in particular) within the SOA4All Website was illustrated.

This document is intended as a complement to the Website as such.

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