SWAD-Europe Deliverable 3.5: Dissemination and Use Plan

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W3C Semantic Web Advanced Development for Europe (SWAD-Europe)

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Dissemination and Use Plan

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Abstract:

The Dissemination and Use plan describes plans for the dissemination of knowledge gained during the work, and the plans for exploitation of the results of the project among the different target groups: industry; content producers, researchers and academics; the Open Source community; developers. Expected locations for presentation of information about SWAD-Europe are likely to include: WWW conferences; XML Europe and XML International conference series.

STATUS:

This is the third version of the dissemination and use plan, last updated 2004-06-04. It will be updated throughout the project. Feedback on this draft should be sent to the <u>public-esw@w3.org</u> mailing list. <u>Archives of that list</u> are publicly available.

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Summary

The Semantic Web Advanced Development in Europe (SWAD-Europe) project aims to support W3C's Semantic Web initiative in Europe, providing targeted research, demonstrations and outreach to ensure Semantic Web technologies move into the mainstream of networked computing.

The project aims to support the development and deployment of W3C Semantic Web specifications through implementation, research and testing activities. We aim to play a key role in the evolution of the Semantic Web, through education and outreach to developers, organisations and content creators; through Open Source implementation and testing, and through pre-consensus technology development to drive and inform the creation of new Semantic Web standards.

The period 2002-2004 will see the first wave of mainstream Semantic Web applications. SWAD-Europe's role will be to ensure that the critical technology components required for widespread Semantic Web adoption are readily accessible to European industry, consumers, and developers. This involves finding and maintaining a balance between "in-house" Open Source tool development, community building, outreach and evangelism, combined with more technologically advanced research and analysis to support and field-test Semantic Web standards.

The objectives of the project can best be understood in terms of the kinds of user scenarios that will inform the project throughout its lifecycle. As longstanding participants in the Semantic Web, XML and Web developer communities, the project team are familiar with a number of 'frequently asked questions' (FAQs) that arise when considering Semantic Web technology. These come from technical, consumer, content creator and business perspectives, but a common theme recurs: technology integration: questions like "Which standard should I use?" "How do I use RDF with XML Schemas?" "How do I use Web Services with Web Ontologies?" "Can I use MathML with RDF-rules?"

The objectives of the project's planned dissemination activities are to provide answers to these kinds of frequently asked questions by talking to specific target communities, namely

- Internet, Web and Open Source developer communities
- Academic and Research Community
- Content and Tool Producers
- Industry and Commerce

The topics that will need to be disseminated include:

- Background and context, details of partners
- Opportunities for collaboration
- Events: workshops, meetings
- Writeups, demos, technical information
- Project Deliverables and Related findings
- Presentations
- Related projects

A variety of methods will be used to disseminate information in SWAD-Europe. The emphasis of the dissemination will be within existing communities and their means of dissemination. Dissemination will be a two-way process, organising and writing up information already known within a community, and making it available in a useful form for others; and bringing communities and their members together for discussion and dissemination of ideas. In particular:

- Outreach mailing lists, IRC (Internet Relay Chat)
- SWAD-Europe web site, wiki and weblog
- Workshops
- Conferences, journal articles, web articles
- Contacts with related projects
- Tshirts and other rewards

The Dissemination and Use Plan describes in as much detail as possible the types of dissemination activity which will be undertaken within the project, grouped in six-monthly intervals.

Introduction

The Dissemination and Use Plan (DUP) provides a comprehensive view of the expected results, their possible contribution to new or existing products, services, infrastructures and knowledge bases, the intended exploitation, dissemination and use by the consortium and / or the individual participants.

Dissemination Objectives

Expected results of the project - The SWAD-Europe project[1] aims to support W3C's Semantic Web[2] initiative in Europe, providing targeted research, demonstrations and outreach to ensure Semantic Web technologies move into the mainstream of networked computing.

The project aims to support the development and deployment of W3C Semantic Web specifications through implementation, research and testing activities. SWAD-Europe aims to play a key role in the evolution of the Semantic Web, through education and outreach to developers, organisations and content creators; through Open Source implementation and testing, and through pre-consensus technology development to drive and inform the

creation of new Semantic Web standards.

The primary output of the project is the project website. This contains frequently asked questions (FAQ) documents detailing answers to technical questions (for example on RDF query languages[3]), reports[4] on particular areas of technology, an archive of email discussion[5] related to the project including pointers to other archived discussions, and presentations[6] made as part of the project.

Some of the primary results of the project will be workshops (for example on the Semantic Web and calendaring[7]) at which developers in Europe have the opportunity to meet people working in similar areas and learn about each others' work as well as international projects. Continuation of the development of software and methodologies as a result of these workshops may take place on mailing lists, or in face to face or virtual meetings (see for example the RDF calendar workspace[8]).

The objectives of our planned dissemination activity appear in workpackage 3, Dissemination and Exploitation[9]:

- To disseminate information about the project, its objectives, the approaches and results
- To facilitate collaboration and information exchange between relevant Semantic Web communities
- To promote, where applicable, the use of the resulting tools, technologies and applications amongst appropriate research and development communities
- To create two-way communication channels with stakeholders, academic communities and industry for disseminating the project deliverables and conclusions within the wider Semantic Web context.

The following sections give full details on

- identification of communities and communication fora
- types of information to be disseminated
- tools which will be used for dissemination

1 Relevant communities - The work of SWAD-Europe will be of interest to many communities in Europe and beyond, and more communities and fora will become important as the project progresses.

1.1 Internal audience

Project staff

Project staff need to be kept up to date both with technical developments within the project and with the administrative and financial requirements of the project.

As part of workpackage 2, the project director has provided technical direction in the first instance by writing a project technical direction plan which was made available in month 9.

Technical developments

These will be disseminated to project partners via the same channels as the rest of the public, namely via community mailing lists and IRC channels and via the project website[1]. Details of these are below. There is also a project mailing list, public-esw@w3.org. The archives of this list are public[4], and anyone can post to the list (after subscribing to any W3C mailing list, including this one, for spam-reduction purposes). This list is principally used for project specific discussion about project deliverables. Care is taken to use community fora where they exist, without excluding project partners from the discussion.

Administrative and financial requirements

Where information is confidential, project communication takes place on the private list swad-e-admin@bristol.ac.uk. There is a private administrative website for reporting. Quarterly management and technical face to face meetings are held (detailed on the project events page[10]), supplemented by face to face and telephone meetings on technical topics.

Administrative data in RDF

In the spirit of using what we promote, we are using open tools and standards to store and process practical and administrative data. The workpackage information is held in a profile of XHTML for human-readability as the primary copy of the data, and information such as the name of the deliverable, its description, and when it is due is scraped out of the XHTML using Perl. Other information about who is responsible for which deliverable has been processed into RDF from text notes, and can be combined to produce for example a Gantt chart or an effort spreadsheet for the project, in this case using Ruby RDF tools developed by Dan Brickley. Information about the tools used is available[11].

W₃C

W3C's Semantic Web Activity is a major focus of the project - the project is expected to provide ongoing input to as well as receive input from the wider Semantic Web work at W3C. In addition, the project will provide input to specific areas of W3C work, including accessibility.

W3C working groups track deliverables, interdependencies between various specifications in development, and

issues arising from implementation as part of their work. W3C project staff are also in some cases working in other groups and will use the tools developed for the administrative tracking of the project in their general work. This development will be combined with related work at W3C to leverage deployment of semantic web technologies in a "live" working environment. An example of the latter is the use of the RDF calendar schema[8] developed as a result of the RDF calendaring workshop [7].

ILRT

ILRT has approximately 40 projects hosted within it at any one time, most of which have external partners. These partners come form various communities: website design, teaching and learning, University of Bristol, Governmental Organisations, and UK Research Councils. Project members at ILRT promote tools and practices developed within the project within these projects, by working with individual projects to find Semantic Web solutions, particularly within mainstream web development projects; and by giving presentations within the ILRT and University of Bristol about the progress of the SWAD-Europe project; and by email updates to the ILRT mailing list. SWAD-Europe work within ILRT has included advice on the use of RSS channels for distributing information about conferences within the LTSN Economics project[12] and a SVG demonstration[13] showing the use of RDF descriptions of projects and people to illustrate the structure of the ILRT.

HP Labs

Hewlett Packard Laboratories has a number of research projects both developing and applying semantic web technology. The Semantic Web Core project, developer of the well-known Jena Open Source toolkit, is leading HP's participation in SWAD-Europe. They are committed to promoting the success of the Semantic Web through support for standardisation, high quality toolkits, reference applications and outreach. Project members disseminate results from SWAD-Europe to partner projects within HP (and to customer organizations when appropriate) through seminars, internal mailing lists and tool distribution. Relevant issues that are raised by the application work of these other internal groups also feed back into the SWAD-Europe project.

CCLRC

Business and Information Technology Department (BITD) within CCLRC is involved in a number of UK and European projects, considering for example grid technologies in e-business (GRASP[14]) knowledge management in the public sector (Pellucid[15]) and information exchange in scientific observation (Marine XML[16]). Further, BITD develops corporate business and information systems for CCLRC, including web provision, digital libraries and information management systems. The CCLRC SWAD-Europe project team seeks opportunities to raise awareness and usage of Semantic Web solutions in the programmes of the department, through presentations, training courses and consultancy, as well as staff working across projects. Further, SWAD-Europe members in BITD promote the use of Semantic Web solutions in the scientific programme of CCLRC through consultancy, and training, in for example science data management and curation. CCLRC hosts the W3C Office for the UK and Ireland, and promotes Semantic Web solutions as part of its outreach activities.

Stilo

Stilo has typically around four or five active Research and Development projects, alongside development of our own core technology. These projects usually involve external partners, either in industrial projects such as SophXPack which is a 4-member consortium working on Knowledge Engineering technology in Aerospace Design, or joint industry-academic projects such as SWAD-Europe and MONET. There is a regular interchange of ideas and sometimes staff between projects, for example we are using some Semantic Web ideas on SophXPack. In addition we hold internal events (titled 'doughnut meetings'), at which projects are presented.

1.2 External audience

The SWAD-Europe project has four principal audiences:

Internet, Web and Open Source developer Community

Since RDF became a W3C Recommendation in 1999, it has seen significant adoption by Web developers and Open Source software projects, for example Adobe's XMP format, and the Open Source projects RSS 1.0 and rpmfind. SWAD-Europe builds on this, and on W3C's existing Open Source software projects (such as Amaya, CWM, SiRPAC, Jigsaw) by acknowledging and explicitly focusing on Internet-oriented Open Source software projects as a key Semantic Web stakeholder community.

Academic and Research Community

The ideas and technologies currently termed "Semantic Web" are largely derived from long-established work in Computer Science, Information Retrieval, Knowledge Representation, Logic and related areas. Semantic Web development requires an understanding of the additional architectural and pragmatic requirements imposed on traditional technology from these fields by the global, distributed Web architecture. Many experts from the academic and research community have an in-depth understanding of the relevant theory, literature and tools, but

little familiarity with Web and Internet standards and the architectural principles of the Web. SWAD-Europe will seek ways of drawing academic researchers (and their students) into the Semantic Web developer community, through (for example) FAQ documents, sample datasets and student project proposals.

Content and Tool Producers

If SWAD-Europe is to succeed in stimulating Semantic Web adoption throughout Europe, it will need to provide tools, technology and advice to make it easier to publish data online in Semantic Web (RDF, WebOnt etc) form. Several workpackages produce tools (eg. XSLT translations) that could facilitate this. By focusing on Content and Tool producers as a critical consumer of SWAD-Europe deliverables, the probability of these tools resulting in more RDF/XML online content is greatly increased. Following the scenario-led approach of the SWAD-Europe demonstrator and outreach activity, there will be a strong emphasis on the production of simple, clearly written documents for mainstream developer and content producing audiences. Providing tool-supported answers to common questions like "How (and why!) do I deploy Dublin Core and RSS on my website" is a major activity of the project.

Industry and Commerce

To date, Semantic Web technology (particularly RDF and Ontology languages) adoption has been most rapid in the academic, research and open source / internet environment. A number of companies have products, services and data formats that employ RDF, but often commercial solutions adopt a solely XML-based approach. SWAD-Europe will not focus directly on outreach to and involvement of corporate stakeholders; instead, SWAD-Europe's deliverables are intended to provide the raw materials (FAQs, free tools etc) that make the Semantic Web approach more attractive and understandable to such an audience. The SWAD-Europe project consortium includes commercial representation (HP Labs, Stilo), and further input from Industry will be solicited through W3C.

Two case studies

All these groups are targeted within SWAD-Europe. Two case studies are provided illustrating dissemination approaches to these groups so far in the project: the RDF Calendar workshop[7] workspace and meetings[8] and the RDF query testcases work[17].

RDF Calendar workshop, workspace and meetings

Since early 2001, the RDF interest group has had an informal taskforce examining calendaring and scheduling issues and RDF. This arose out of an initial exercise by Tim Berners-Lee which described how one might approach the problem of converting iCalendar to RDF, and later, from discussions at the W3C Technical plenary 2001.

A SWAD-Europe workshop on calendaring and RDF was held in Bristol, UK in October 2002. There were twenty-one participants of the workshop, from the industrial, Open Source and research communities, and including representatives from the RSS community, the XML/Topic Maps community, iCalendar IETF working group, W3C, Universities of Southampton, West Florida, Madrid and Bristol; also companies: Mediatrans, HP Labs, Techquila, BBN Technologies / Verizon, SkiCal consortium; and from various countries: Italy, Spain, US, Belgium, Sweden, and UK.

The work has continued as a workspace and as a series of virtual meetings, resulting in an RDF schema for calendar information. These meetings have been attended by open source developers; industry, academic/research and content and tool producers: Mozilla calendar and Apple developers; members of the RSS community; Chandler developer; members of the W3C team; iCalendar (RFC 2445) specification contributors; and SWAD-Europe project members.

RDF query testcases

Ongoing work as part of workpackage 7: RDF API and query, has resulted in a series of IRC virtual meetings on the subject of RDF query testcases. This is pre-consensus work involving ILRT, HP (RDQL, Jena), and @semantics, a small European-based Semantic Web company; and also W3C team members, independent Open Source developers; other companies and members of IST projects and other research projects.

There are many toolkits currently available, using many different RDF query languages. The aim of the meetings is to produce a tests for RDF query which are language and toolkit-independent, in order to improve the consistency of these implementations. Three toolkits have provided tests at the time of writing; two toolkits are running implementations of the test framework (which is described in RDF for consistency). Several 'birds of a feather' meetings at various conferences have also resulted; it seems likely that this work will contribute to a future RDF query working group at W3C.

2 Types of information - 2.1 Background and context, details of partners

There is a partner page[18] on the project website, detailing partner names, people, contact addresses and urls. Partners will in most cases have information on their own sites about the project as well, for example ILRT[19] CCLRC/RAL[20].

2.2 Opportunities for collaboration

There is a list of current and future deliverables[21] available on the website. Workpackage leaders make use of the project list, and where appropriate community mailing lists and other communication channels to discuss each deliverable from its inception and invite feedback.

Workpackage leaders make use of the project email list to announce progress on deliverables and invite feedback, from the beginning of work through to the publication of the final reports. The list is publicly accessible and archived to facilitate easy participation, but where appropriate community for exist announcements will also be made there to ensure that the wider community is kept in touch with developments from the project.

The workpackage list[22] is publicly available, as are reports completed and in development[23] (see below).

2.3 Events: workshops, meetings

A series of developer workshops will be held at approximately three-monthly intervals by the SWAD-Europe project. These workshops will bring developers together from all four target communities to discuss technical developments in a particular field. Three workshops were held in 2002. The first was on EARL and image annotation[24], held at the University of Bristol in June 2002. The International workshop[25] was held in Florence at Dublin Core 2002 in October 2002. Also in October a workshop was held in Bristol (co-located with the W3C WebOnt working group face-to-face meeting) about Semantic Web calendaring[7]. In 2003, the focus has been on virtual workshops[26], notably RDF geographical work[27]. In November 2003 a workshop on Semantic Web Storage and Retrieval was held in Amsterdam[28]. Further workshops planned for 2004 include a workshop on imaging in Madrid[29] and an introduction to the Semantic Web in Spanish[30] (both June); RDF and accessibility (Copenhagen, July); Social Software (Galway, September); Thesauri (Bath, September).

There is a project events page available in XHTML and as RSS 1.0[31] By making the information available in the RSS syndication format, other organisations can display the information in their websites. Project members have compiled a list of Semantic Web conferences and other events[32] to make scheduling workshops easier and for the community to use.

2.4 Writeups, demonstrators, technical information (developers page)

Demonstrators are an important part of the SWAD-Europe approach. Here are some examples of demonstrators available at the time of writing:

- The extensive Semantic Blogging requirements document[33], has been used to design the first open demonstrator (Deliverable 12.1.3)[34].
- The 'What language do I speak?'[35] demonstrator illustrates the use of data aggregation and query to answer questions about languages spoken.
- Semantic Web Developer Map[36]: representing locations of people, research groups and projects explains and illustrates techniques for generating SVG maps from RDF data.
- SWAD-Europe Annotea tools[37] written in Ruby illustrate how to create an Annotea client.

A developers' page[38] and a code page[39] are being maintained as a resource for developers, detailing experiments, demonstrations and other technical work arising from interactions with communities in the project.

2.5 Project Deliverables and Related findings

A reports directory[4] and page provides easy access to completed reports, which are also announced on the project list and other appropriate lists. The publicly accessible reports directory allows people to track the development of reports as they are being produced, and offer feedback, comments, or simply get information as early as possible.

2.6 Presentations

A list of presentations[40] given about SWAD-Europe is maintained on the project website, along with associated presentation materials. A list of events[32] suitable for presentations and other dissemination activities is also being maintained as part of the project. Specific conferences are listed below.

2.7 Related projects

SWAD-Europe will maintain links with related EC projects such as KTWeb[41], which provides information about European projects and OntoWeb[42], an IST Thematic Network.

Many connections between SWAD-Europe and other IST-funded projects are maintained through joint participation in W3C working groups and via developer level contacts on mailing lists, conferences and other community fora such as IRC.

As an extension of the W3C's Semantic Web Advanced Development[43] in Europe, SWAD-Europe project members are working closely with researchers at W3C. This brings them into contact with other W3C Semantic Web Advanced Development work taking place internationally, as well as with the whole range of Web development work at W3C.

As part of the dissemination in SWAD-Europe, a postcard[44] has been produced generated using RDF descriptions of Semantic Web groups in Europe and location information about them. An interactive SVG version is also available. In recent months a tshirt has been designed for the project[45], and this design will also be made into a postcard. The tshirt and accompanying postcard have been designed to be relevant and useful after the end of the project, as well as being a valuable promotional tool while the project is in progress.

Project partners have good contacts with other Semantic Web projects, in particular HP Lab's Semantic Web Activity[46] and the MINDSWAP group[47] inside the MIND LAB at The Institute for Systems Research, University of Maryland, USA.

3 Communication channels - 3.1 Outreach - mailing lists, IRC, presentations

Project members will continue to actively participate in community mailing lists, for example:

- Semantic Web Interest Group[48]
- RDF Logic[49]
- RDF calendar[50]
- RDF Rules[51]
- RSS-Dev[52]
- FOAF (friend of a friend)[53]
- RDF Thesaurus [54] (This list was started as part of the project, but has a wide external community)

Project members use these mailing lists for discussions and promotion of deliverables and other outputs, and for encouragement of community participation in the project. public-esw@w3.org[4] is the public mailing list for the project, used for detailed discussion of deliverables.

A mailing list for discussion about RDF and thesauri has been created as part of the project[54].

The RDF Interest Group IRC channel [55] is a useful and popular resource for the Semantic Web community. Project participants will continue to maintain an active presence on the channel.

Project partners from time to time make presentations of the project and the Semantic Web in general to audiences throughout Europe. As far as possible materials used for these presentations are made available through the project website [6].

3.2 SWAD-Europe web site

The website will develop as the project develops, but its purpose throughout the project is as a first point of contact for SWAD-Europe for all potential audiences, including the project partners, and as a record of the work done in the project and ongoing work in the area.

Its structure approximately follows the structure of Section 2 above; there are sections about background and contacts, opportunities for collaboration, events, code and developers, deliverables and presentations.

The ESW wiki[56] has been created as a tool to encourage community participation. Wikis enable any individual to write or add to a page on a topic; the ESW wiki is been well-used by the Semantic Web community.

3.3 Workshops

As detailed in workpackage 3[9], the project includes an active developer outreach effort. We anticipate a presentation (public or to selected developer groups) in at least one European country, every 12-16 weeks. This outreach work ranges from small 'clinics' to larger workshops, and targeted at four key audiences outlined in WP2: content and tool producers, academic/research, Open Source developers and commercial implementors.

A workshop to start the project, co-located with DC2002, allowed partners to gather information from an important stakeholder in the Semantic Web community about the technologies and experiences available at the start, and also inform the community of the existence of the project as a hub for linking projects and as a locus of advanced research and practical analysis of the Semantic Web technologies. A workshop to end the project will allow partners to disseminate results and experiences from the project to relevant communities and identify pathways for future research and sustainability of project outputs (where appropriate).

3.4 Conferences, journal articles, web articles

Targeted conferences are detailed by month below. Partners have experience and interest in publishing in academic journals and at academic conferences, and also creating web publications. A major commitment in the project is guaranteeing URL persistence for software and documentation for at least as long as the technical coordinating partner W3C exists in its current form.

3.5 Logo/look and feel/project identity

SWAD-Europe (Semantic Web Advanced Development in Europe) was chosen as a name because the project aims to support W3C's Semantic Web initiative in Europe. A logo has been created for use in project documents; the W3C and IST logos are being used.

A logo[57] and a postcard[58] have been created to promote SWAD-Europe.

CSS stylesheets[59] have been provided for project use.

3.6 Contacts with related projects

Contacts with related projects will include both contacts with similar European projects, especially those funded by the European Commission, and related standardisation projects within the W3C and associated with the other partners.

Related EC projects

KTWeb is a community portal for 'Knowledge Technology Communities', and so provides a central point for learning about related EC projects. Ontoweb provides a point of contact for research groups in ontology-based knowledge management. The RAPIDUS EC[60] is a means for people to register an interest in news items documents and projects under certain themes. The regular email updates from this service enable the project to keep track of related EC developments. Both KTWeb and Ontoweb have mailing lists which perform similar functions for those communities.

Most recently our focus has been on working with the new crop of FP6 EC projects, such as SEKT, DIP and KnowledgeWeb, which are all part of the SDK Cluster[61]. SWAD-Europe's final workshop will be held in conjunction with DERI Galway with members of these SDK Cluster projects as part of the Organising committee and the Programme Committee. SWAD-Europe project members also work with many members of EC-funded projects via standardization work, most recently in the newly formed W3C Data Access[62] and Semantic Web Best Practice[63] working groups.

Related standardisation efforts

The Semantic Web community is an international one. SWAD-Europe is committed to maintaining and building upon existing international collaborations, to the adoption and promotion of international standards, and to increasing the involvement and visibility of European Semantic Web developments on the world stage. This will be achieved through the SWAD-Europe advisory mechanisms (below), and through liaison with W3C, in particular through W3C's international Offices network.

SWAD-Europe embodies a strong commitment to the role of standards as a foundation for the evolution of the Web into a Semantic Web. The direct involvement of members of the W3C's Semantic Web team in this project (through the ERCIM contractor) is based on practical first-hand experience with the creation and deployment of key Semantic Web technologies, notably RDF. W3C's Semantic Web Activity includes an Advanced Development component to ensure that W3C's formal standards work is complemented by field testing, prototyping and quality assurance activities. SWAD-Europe has been designed to contribute to this initiative in the following ways:

- undertaking exploratory implementation and design work in 'pre-consensus' areas (such as RDF Query), laying groundwork for possible later standardisation through W3C Process
- providing 'life after standardisation' support for existing W3C specifications, by developing tools and worked scenarios that promote the adoption of these standards
- researching and reporting on "hot topic" issues that have arisen during the standardisation process (eg. XML Schema language convergence, Semantic Web 'versus' Web Service concerns etc.)
- combating 'acronym overload' by providing analysis, use cases and tools that showcase practical strategies for combining multiple standards within a single application (eg. using SVG, MathML, RDF annotations and XML Schema together)

In addition to W3C's activities, the work of numerous standardisation and industry bodies (eg. IETF, ISO, Dublin Core Metadata Initiative, RSS) is relevant to SWAD-Europe's goals and to the ongoing coordination of the research, documentation and demonstrators produced within the project. While the primary focus of the project is to support W3C's Semantic Web initiative, involvement with other standardisation efforts will be encouraged. Two specific mechanisms are planned as part of workpackage 2's technical and scientific coordination: liaison through the SWAD-Europe advisory mechanisms and through W3C's Semantic Web Activity. It is not possible to coordinate directly with every relevant standards-related group. Workpackage 2's Advisory Group activity is intended to ensure that a representative cross-section of the stakeholder community has representation within the project. More detailed liaison with other standardisation efforts will be conducted through consultation with W3C's Semantic Web Coordination Group.

The project draws guidance both from individual advisors as well from the Semantic Web Coordination Group (SW CG). A number of individuals, including experts and users, interact with the project through the public public-esw mailing list, as well as through additional mechanisms such as the ESW Wiki, the public-esw-thes mailing list (for Thesauri discussion), and through their own and the project's cross-referenced weblog articles.

These mechanisms, while relatively informal, have allowed the project team to draw upon a wide range of expertise and to have ongoing, constructive feedback on the formal and informal works of the project.

3.7 Tshirts and other rewards

The success of SWAD-Europe depends on interactions and input from the community and on community goodwill. From month 21 (March 2004) we have been distributing project tshirts[45] to individuals who have made a significant contribution to the Semantic Web according to the opinions of the project participants. These include individuals from all our target groups; currently the numbers are approximately: academic: 25, commercial 18, developers 10, content creators 18, with more to distribute.

4 Dissemination and Use Plan - The Dissemination and Use Plan below describes in detail the activities which will be undertaken in 6-monthly sections. It describes the workshops, conferences and other opportunities for dissemination on each time period, and also the deliverables in progress or completed in that period.

4.1 Months 1-6 (May-October 2002)

In the first six months of the project there are several dissemination opportunities at various conferences, and three

SWAD-Europe workshops will be held in this time period, including the SWAD-Europe International Workshop.

Conferences/presentations

The World Wide Web Conference 2002

- Ralph Swick and Dan Brickley presented on Swick and Dan Brickley presented on Swick Semantic Web Advanced Development and talked about SWAD-Europe within this context.
- Charles McCathieNevile presented a paper <u>The Role of Community in Technical Development</u> describing the planned SWAD-Europe process as an example of applying the lessons of community participation in technical development.

International Conference on the Semantic Web (ISCW)

• Brian Matthews <u>presented</u> <u>a paper (PDF)</u> about SWAD-Europe at the International Conference on the Semantic Web (ISCW).

las VI Jornadas del SIDAR

• <u>Simultimedia y la Web semantica</u> (en españ), presented by Charles McCathieNevile at las VI Jornadas del SIDAR (Tenerife, Spain, 24 October 2002)

First iTrust Workshop On Trust Management In Dynamic Open Systems Glasgow, Scotland, 2-4 September 2002.

• Trust and the Semantic Web Brian Matthews

Workshops and meetings

The <u>First SWAD-Europe project face to face meeting</u> was held on 30th June 2002 in Bristol, UK. The second face to face will be held on 23rd September 2002 at Rutherford-Appleton Labs, Oxfordshire, UK.

Three SWAD-Europe project workshops were held in this period:

- An <u>mimage/annotation workshop</u> was held in Bristol in conjunction with W3C's web Accessibility Group meeting on EARL on 24-26 June 2002. The <u>mworkshop report</u> is available.
- <u>SAN International workshop</u> was held in conjunction with the <u>Dublin Core Conference 2002</u> 14-17 October 2002, Florence, Italy. A <u>workshop report is available.</u>
- <u>A developer workshop about calendaring and the Semantic web</u> was held on 9th October 2002, co-located with the WebOnt face to face meeting in Bristol, UK. A <u>wworkshop report</u> is available

Publications

☞ERCIM News

- Semantic Web Advanced Development in Europe, by Brian Matthews, Michael Wilson and Dan Brickley
- Calendars, Schedules and the Semantic Web, by Terry R. Payne and Libby Miller

Deliverables completed

Workpackage 3: Dissemination and Exploitation

- std 3.1 Project fact Sheet
- std 3.2 Project Website
- 3.3 Project Mailing List
- <u>3.5 Dissemination and Use plan</u>
- <u>\$\infty\$3.6 First Developer Workshop Report</u> (EARL / Image Annotations workshop)

Workpackage 10: Tools for Semantic Web Scalability and Storage

- \$\sim 10.1\$ Scalability and Storage: Survey of Free Software / Open Source RDF storage systems
- 10.2 Mapping data from RDBMS

Workpackage 12.1: Open demonstrators

Workpackage 12.2: Annotations demonstrator

- 12.2.1 Annotation Demonstrator Server Report
- 12.2.2: RDF-based annotation system readme

4.2 Months 7- 12 (November 2002 - April 2003)

Conferences/presentations

LexiPraxi2002, 13 December 2002

• <u>Service Standards (en français)</u>, presented by Charles McCathieNevile

Project members attended <u>SIST 2002 conference</u>, and the <u>SEuroWeb conference</u> on the Web and the Grid held in Oxford, UK, and project leaflets were distributed at both events.

Workshops and meetings

In this period SWAD-Europe in collaboration with the RDF Interest Group held 13 IRC meetings about RDF and calendaring (<u>RDF Calendar Workspace</u>, <u>ESW RDF Calendar wiki page</u>), and 5 RDF query tests IRC meetings (<u>RDF Query (and Rule) Testcase Repository</u>). There were also two RDF geo meetings held in this period (<u>RDFIG Geo vocab workspace</u>).

A third management meeting was held on 21 January 2003 at ILRT; and a fourth was held on 2 April 2003 at Stilo, Bristol, UK.

Publications

interChange, the International SGML/XML Users' Group Newsletter

• Report on the RDF calendaring workshop

Deliverables completed

@Workpackage 2: Technical and Scientific Coordination of Research and Demonstrations

• <u>2.1 Project Technical Plan</u>

™Workpackage 3: Dissemination and Exploitation

- <u>3.4 Initial Workshop Report</u> (Dublin Core and RDF)
- 3.7 Second developer workshop report (Semantic Web calendaring)

Workpackage 4: Semantic Web and Web Services

• 4.1 RDF/XML and SOAP for Web Data Encoding

- 7.1 RDF API requirements and comparison
- 7.2 Databases, Query, API, Interfaces: report on Query languages

@Workpackage 10: Tools for Semantic Web Scalability and Storage

- 10.2 Mapping data from RDBMS
- @10.3 Implementation report on scalable Free Software/Open Source RDF storage system

──Workpackage 12.1: Open demonstrators

• 12.1.2 Semantic blogging and bibliographies - requirements specification

4.3 Months 13-18 (May-October 2003)

Conferences

The 12th International World Wide Web Conference 20-24 May 2003, Budapest, Hungary

- SWAD-Europe Overview Dan Brickley
- "The Web and the Grid" <u>Trust and the Semantic Web</u>, Brian Matthews, Developers' Day track 4

 Semantic Blogging and Bibliography Management (PDF), Steve Cayzer, BlogTalk, Vienna, May 23-24, 2003

• Semantic Web Update - W3C RDF and OWL Standards, Development and Applications, Dave Beckett

EuroHELP, London, June 2003

• Today and Tomorrow on the World Wide Web, Michael Wilson

Project members also attended the <u>W3C Semantic Web tour</u>. Postcards promoting the project were <u>@created</u> and provided in the conference packs at WWW2003 and were made available at the W3C semantic Web tour.

Workshops and meetings

One developer workshop was held in this period:

• RDFIG virtual workshop

Two management/technical meetings for the project were held in this period.

Deliverables completed

Workpackage description: 3: Dissemination and Exploitation

• std 3.10: Dissemination and Exploitation: Developer Outreach Report

Workpackage description: 5: Integration with XML Technology

- <u>\$\infty\$ 5.1: Schema Technology Survey</u>
- <u>\$\infty\$ 5.2 Extracting Semantics from XML Structure</u>
- <u>\$\iiis\$ 5.3 RDF/XML Test cases for RDF Logic, Web Ontology and Maths content</u>

☞Workpackage description: 7: Databases, Query, API, Interfaces

- \$\overline{\pi} 7.3: Databases, Query, API, Interfaces Public release of reference implementation of an RDF API
- \$\alpha 7.4: Databases, Query, API, Interfaces. Public release of a "strawman" query language implementation

☞Workpackage description: 8: Thesaurus Research Prototype

- Core RDF Vocabularies for Thesauri
- 8.2: Review of RDF Thesaurus Work

Workpackage description: 9: Visualization and Accessibility

• 9.1 Visualisation and Accessibility - preliminary ideas

Workpackage description: 12.1: Open demonstrators

- <u>\$\infty\$12.1.3 Demo 1 Implementation: Semantic Blogging</u>
- 12.1.5 Semantic Portals Requirements Specification

Workpackage description: 12.3: Visualisation Demonstrator

- 12.3.1 Transformation libraries for RDF
- \$\infty\$12.3.2 Transformation libraries report

4.4 Months 19-24 (November 2003 - April 2004)

Conferences

XML 2003

• RDF Hyper-linking, by Dan Brickley.

™XMLEurope 2004

• Modernising Semantic Web Markup, by Dave Beckett.

Other talks

- Coding EARL by example, Charles McCathieNevile November 2003 (4 languages)
- <u>Calendar to RDFical: a Semantic Web vocabulary created with community process-lite</u>, by Libby Miller (Presentation to Intelligence, Agents, Multimedia Group, University of Southampton, 2003-11-03).
- <u>Thesaurus and Symbol Users</u> by Charles McCathieNevile.
- Semantic Web Applications, by Charles McCathieNevile (presented to the W3C Israeli Office: Semantic Web seminar (9 Mar 2004)).
- <u>Solution of the Semantic Web</u> by Dan Brickley (presented to the W3C Israeli Office: Semantic Web seminar (9 Mar 2004)).
- European Semantic Web Update, by Dan Brickley (INTAP talk (8 April 2004))
- <u>Swartic Web developments</u>, by Dan Brickley (presentation to National Institute of Information and Communications in Japan (12 April 2004))
- <u>SWAD-Europe Synthesis discussions</u>, by Dan Brickley (presented at SWAD-Europe Technical meeting, France, April 2004).
- **Implementing RDQL in Rasqal*, by Dave Beckett presentation to W3C RDF Data Access Working Group, Leiden, Netherlands, 23 April 2004

Workshops and meetings

One developer workshop was held in this period:

• Semantic Web and Scalability

Two project technical/management meetings were held in this period.

Deliverables completed

@Workpackage description: 2: Technical and Scientific Coordination of Research and Demonstrations

- <u>2.2: Project Findings Input</u>
- <u>2.3: Advisory meeting report</u>

Workpackage description: 4: Semantic Web and Web Services

- 4.1: Semantic Web and Web Services: RDF/XML and SOAP for Web Data Encoding
- <u>\$\infty\$4.2</u>: Semantic Web and Web Services: RDF/XML and SOAP for Web Data Encoding

☞Workpackage description: 8: Thesaurus Research Prototype

- 8.3 RDF Encoding of Multilingual Thesauri
- 8.4 Inter-Thesaurus Mapping

Workpackage description: 9: Visualization and Accessibility

• 9.2: Accessibility adoption report

Workpackage description: 12.1: Open demonstrators

• 12.1.4: Semantic Blogging - Lessons Learnt

4.5 Months 25-30 (May-October 2004)

Conferences

⊮WWW2004

 A poster, "Semantic information portals" by Dave Reynolds, Paul Shabajee and Steve Cayzer was accepted for WWW2004.

⊚ESWS

• A poster describing the SWAD-Europe project was accepted for ESWS.

Workshops and meetings

Five developer workshops will be held in this period, on the following topics: Imaging, Semantic Web introduction (in Spanish), Accessibility and eGovernment, Thesauri, and Social Software.

There will be two project technical/managment meetings in this period.

Deliverables in this period

An implementation of an open source toolkit for signature chaining, capability handling and proof-based trust using RDF (11.2) will be completed in this period, as will the final two open demonstrator reports to developers (12.7, 12.8), Finally, a report on how to migrate old thesauri to RDF-based semantic web ones (8.8) is due in month 27.

5 Monitoring and Evaluation - To ensure that our planned dissemination activities reach their target audiences and are helping us achieve our dissemination objectives, we shall use a number of monitoring and evaluation methods throughout the project lifetime.

It has not been possible to monitor use of the SWAD-Europe website, wiki and weblog[64], because these are all held on the W3C site (because of the W3C's url persistence policy[65]), and the W3C's privacy policy[66] means that finding out who was accessing the site to the level of detail required was not possible. Web statistics are themselves notoriously unreliable. Furthermore, the idea of asking users to fill in a short questionnaire before receiving the project newsletter was not successful, with almost no new additions to the mailing list after the newsletter was created.

However we have analysed the groups and countries of attendees of the four workshops we have held and the membership of the two mailing lists for the project, with the following results:

Academic Commercial Developers/OS Content creators

55	47	40		27					
UK	China	Korea	USA	Portugal	France	Netherlands	Greece	Italy	Japan
29	2	2	17	1	4	10	1	9	1
Australia	Denmark	Germany	Norway	Sweden	Belgium	Spain	Hungary	Austria	
1	3	4	1	1	2	1	1	2	

We will include an analysis of tshirt recipients when the distribution of shirts is complete.

It should be borne in mind that our reach is much more extensive than this particularly though our weblog (which is syndicated using RSS 1.0) and via our work on mailing lists and IRC channels. However this influence is impossible to quantify objectively.

6 References - [1]SWAD-Europe project website

http://www.w3.org/2001/sw/Europe/

[2]W3C's Semantic Web initiative

http://www.w3.org/2001/sw/

[3] RDF Query FAQ

[4] SWAD-Europe current and delivered reports

<u>http://www.w3.org/2001/sw/Europe/reports/intro.html</u>

[5] Public SWAD-Europe mailing list

http://lists.w3.org/Archives/Public/public-esw/

[6] SWAD-Europe presentations

http://www.w3.org/2001/sw/Europe/#presentations

[7] Developer Workshop Report 2 - Semantic Web calendaring

http://www.w3.org/2001/sw/Europe/reports/dev_workshop_report_2/

[8] RDF Calendar Workspace

Developer Workshop Report 2 - Semantic Web calendaring

[9] Workpackage description: 3: Dissemination and Exploitation

<u>whttp://www.w3.org/2001/sw/Europe/plan/workpackages/live/esw-wp-3.html</u>

[10] SWAD-Europe events page (XHTML)

http://www.w3.org/2001/sw/Europe/events/

SWAD-Europe events page (RSS)

<u>http://www.w3.org/2000/06/webdata/xslt?xslfile=http://www.w3.org/2001/sw/Europe/events/home2rss.xsl&xmlfile=http://www.w3.org/2001/sw/Europe/events/Overview.html;</u>

Base=http://www.w3.org/2001/sw/Europe/events/

[11] Details of the RDF project management tools

<u>http://www.w3.org/2001/sw/Europe/plan/workpackages/live/README.txt</u>

[12] RSS+events for LTSN Economics

<u>whttp://www.w3.org/2001/sw/Europe/events/view/calmonth.jsp?</u>

url=http%3A%2F%2Fwww.economics.ltsn.ac.uk%2Fevents%2Fevents.xml&mbox=&rdfweburl=

[13] ILRT SVG demonstration

http://swordfish.rdfweb.org/discovery/2003/03/6deg.svg

[14] **GRASP**

<u>ttp://eu-grasp.net/english/default.htm</u>

[15] Pellucid

http://www.sadiel.es/Europa/pellucid/welcome.htm

[16] Marine XML

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http://www.marinexml.net
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[17] RDF query testcases workspace

http://www.w3.org/2003/03/rdfqr-tests/

[18] SWAD-Europe Partner page

http://www.w3.org/2001/sw/Europe/partners

[19] ILRT's SWAD-Europe project page

<u>http://www.ilrt.bris.ac.uk/projects/semantic_web/projects_html?projattrib=4</u>

[20] RAL's SWAD-Europe project page

** http://www.bitd.clrc.ac.uk/Activity/ACTIVITY=SWAD-Europe

[21],[22] SWAD-Europe deliverables page

http://www.w3.org/2001/sw/Europe/plan/workplan.html

[23] SWAD-Europe current and delivered reports

http://www.w3.org/2001/sw/Europe/reports/intro.html

[24] Developer Workshop Report 1 - EARL and Image annotation

<u>http://www.w3.org/2001/sw/Europe/reports/dev_workshop_report_1/</u>

[25] Initial Workshop Report

<u>**http://www.w3.org/2001/sw/Europe/reports/initial_workshop_report/</u>

[26] Developer Workshop Report 3 - A Virtual Workshop

http://www.w3.org/2001/sw/Europe/reports/dev_workshop_report_3/

[27] RDF Geo workspace

http://www.w3.org/2003/01/geo/

[28] Developer Workshop Report 4 - Workshop on Semantic Web Storage and Retrieval

<u>http://www.w3.org/2001/sw/Europe/reports/dev_workshop_report_4/</u>

[29] Workshop on Image Description 7 and 8 June 2004, Madrid, Spain.

<u>http://www.w3.org/2001/sw/Europe/events/200406-img/Overview.html</u>

[30] Introduccion al uso de la Web Semantica

http://www.w3.org/2001/sw/Europe/events/200406-esp/

[31] SWAD-Europe events page

http://www.w3.org/2001/sw/Europe/events/

[32] RSS list of Semantic web events

http://www.w3.org/2001/sw/Europe/200211/swconferences/events1.html

[33] Deliverable 12.1.1: Semantic web applications - analysis and selection

<u>**http://www.w3.org/2001/sw/Europe/reports/chosen_demos_rationale_report/hp-applications-selection.html</u>

[34] Deliverable 12.1.3: Open Demonstrator 1: Semantic Blogging demonstrator

http://www.w3.org/2001/sw/Europe/reports/demo 1 impl/

[35] What language do I speak?

http://www.w3.org/2001/sw/Europe/200305/foaflang/

[36] Semantic Web Developer Map: representing locations of people, research groups and projects

http://www.w3.org/2001/sw/Europe/200303/geo/intro.html

[37] Swad-Europe Annotea tools

http://www.w3.org/2001/sw/Europe/200209/annodemo/readme.html

[38] SWAD-Europe developers' page

<u>whttp://www.w3.org/2001/sw/Europe/developers/</u>

[39] SWAD-Europe code page

http://www.w3.org/2001/sw/Europe/code/

[40] SWAD-Europe presentations

**http://www.w3.org/2001/sw/Europe/#presentations

[41] KTWeb

http://www.ktweb.org/

[42] OntoWeb

http://www.ontoweb.org/

[43] W3C's Semantic Web Advanced Activity

http://www.w3.org/2000/01/sw/

[44] First SWAD-Europe postcard (pdf)

http://www.w3.org/2001/sw/Europe/images/SWADEpostcard-full.pdf

[45] SWAD-Europe tshirt design

*http://liz.xtdnet.nl/swad/isofinal3.gif

[46] HP Labs Semantic Web Activity

http://www.hpl.hp.com/semweb/

[47] MINDSWAP group

http://www.mindswap.org/

[48] Semantic Web Interest group mailing list

http://lists.w3.org/Archives/Public/www-rdf-interest/

[49] RDF Logic mailing list

**http://lists.w3.org/Archives/Public/www-rdf-logic/

[50] RDF Interest Group RDF calendar taskforce mailing list

<u>http://lists.w3.org/Archives/Public/www-rdf-calendar/</u>

[51] RDF Rules mailing list

http://lists.w3.org/Archives/Public/www-rdf-rules/

[52] RSS-Dev mailing list

**http://groups.yahoo.com/group/rss-dev/

[53] FOAF mailing list

http://rdfweb.org/mailman/listinfo/rdfweb-dev

[54] RDF Thesaurus mailing list

http://lists.w3.org/Archives/Public/public-esw-thes/

[55]Semantic Web Interest Group IRC channel

@irc://irc.freenode.net:6667/rdfig

Semantic Web Interest Group IRC logs

http://ilrt.org/discovery/chatlogs/rdfig/latest

[56] ESW Wiki

**http://esw.w3.org/topic/FrontPage

[57] SWAD-Europe logo

<u>http://www.w3.org/2001/sw/Europe/images/Image9.png</u>

[58] First SWAD-Europe postcard (pdf)

**http://www.w3.org/2001/sw/Europe/images/SWADEpostcard-full.pdf

[59] SWAD-Europe stylesheets

http://www.w3.org/2001/sw/Europe/style/

[60]RAPIDUS EC project alerting service

http://www.cordis.lu/news/en/newsalert.htm

[61]SDK Cluster

http://www.sdk-cluster.org/

[62] W3C Data Access Working Group

http://www.w3.org/2001/sw/DataAccess/

[63] Semantic Web Best Practices and Deployment Working Group

http://www.w3.org/2001/sw/BestPractices/

[64] SWAD-Europe weblog

**http://esw.w3.org/mt/esw/

[65] W3C URI Persistence Policy

http://www.w3.org/Consortium/Persistence

[66] W3C Privacy Statements

**http://www.w3.org/Consortium/Legal/privacy-statement-20000612