

Community Involvement Report (D. 14.8)



OKKAM - Enabling the Web of Entities Collaborative Project - Grant Agreement No. 215032

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PCA-0: Community building, exploitation, dissemination

WP14. Community Building, Dissemination and Exploitation

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Executive Summary

- The main elements of the “Community Building” were conceived to be developing awareness amongst, and building the involvement of potential users and partners.
- This was mainly done through a Website and Community web portal and a series of presentations and meetings which are described in this report in Section 2 and Section 3
- The Community building strategy was adjusted to a more a tailored confined approach with specific OKKAM use cases amongst enterprise users ; This was considered to be more effective and realistic rather than pushing for a widespread adoption of the OKKAM ENS as a standard
- The experience of the OKKAM partners (SAP, Elsevier, ANSA), but also the pilot projects which we have developed in the final part of the project (the Tax Agency in Trentino, the City of Manor in Texas, the AGRIS digital library with FAO, the Research Information Systems portal of the Flemish Government, the portal of the University of Trento) really prove the point that the specific “Enterprise” approach was the right one
- Moreover, this targeted community building allowed preparing the sustainability of the OKKAM ENS beyond the EC project funding life; The OKKAM spin-off, which is in creation at the time of writing this report, will sustain the ENS service and the OKKAM API after the project ends and continue development, marketing and maintenance of the software.
- Therefore, many actions were undertaken to build contacts with potential partners that could play a possible role to sustain the OKKAN ENS beyond the life of the project. There were also presentations to and meetings with investors as described in section 3 of this report.
- These actions are listed in Section 3 of this report
- As a conclusion going forward, we feel that the OKKAM spin-off will need to build community interest around specific use cases of the OKKAM ENS in which it gain sufficient visibility, critical mass of being a solutions provider of choice in a targeted market niche or segment; it will have to be selective in pursuing not too many segments but rather one of two initially.

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1. Strategy & findings of Community Building

Initial objectives and tasks planned

The objectives of WP14 included amongst others, as stated in the Description of Work:

- to gain credibility (reputation, visibility) and acceptance from targeted communities in order they consider more easily to participate to the experimentations and later to recognize and join the future new standard
- to foster the creation of an OKKAM Communities and to support them

The task would develop and implement a strategy for community building and involvement. The main elements of this strategy were conceived to be the following: Community web portal, Information and Awareness face-to-face meetings, Partnerships and Public Relations and Standardisation processes. In this way three levels of action: awareness, dissemination and standardisation will be in permanent interaction and will reinforce each other.

“Community” strategy revision during the project

Several reports of the Project made clear that a tailored confined approach with specific OKKAM use cases amongst enterprise users would be more effective or realistic than pushing for a widespread adoption of the OKKAM ENS as a standard. These reports included

- D14.6 Dissemination and Exploitation Plan Update (Month 18).
- D14.7 Sustainability & Business Plan (Month 24).

Or more recently the

- D5.8. OKKAM Entity Management

The reports mentioned above highlight concerns in the (Semantic) Web community generally which would make a widespread and quick adoption of OKKAM troublesome. These included:

- Unwillingness to have a dependency on a centralized third-party service which, moreover, is not yet a standard;
- Concerns about “trust” and “provenance” which have to do with an URI for an entity encoding some notion of ownership and provenance which the OKKAM ENS does not inherently offer;
- Relevance of data as users as heterogeneous information about an entity attached to the same identifier (the OKKAM id) would make it difficult for users to interpret the relevance of the data.

Fundamentally, there was an assumption that the success of OKKAM would be on the side of broad user generated content on the Web. However, this bottom-up approach seemed to be unfeasible as OKKAMized content would not be available in large amount on the web. The challenge of generating critical mass would be too high.

Also it was felt that it would be easier to build relevant OKKAMised content in specific enterprise data environments. Therefore, several small, but significant, shifts in the way the OKKAM Ids were positioned were unavoidable, away from building a broad community of users and developers to a more focused use in specific enterprise networks and systems. These shifts included:

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- Offering OKKAM identifiers as a link between identifiers (or additional identifier) rather than a single identifier
- Making the identity and reference more “neutral” by presenting OKKAM ids as tools for fixing reference, and reference as the “intersection” across different identities attached to the same object
- Focussing on Intranets rather than “Internet” by devoting more effort in smaller networks (e.g. institutional portals, digital libraries, Intranets, etc.) where the positive effects of global naming across but “within” the independent and heterogeneous datasets and systems is more tangible.

The experience of the OKKAM partners (SAP, Elsevier, ANSA), but also of some of the pilot projects which we have developed in the final part of the project (the Tax Agency in Trentino, the City of Manor in Texas, the AGRIS digital library with FAO, the Research Information Systems portal of the Flemish Government, the portal of the University of Trento) really prove the point that the Enterprise approach was the right one.

This does not mean that the OKKAM systems and knowledge will not broadly be adopted. The fast development of initiatives like Open Government Data and Linked Data have shown that there is a need for smarter identifier systems such as offered by OKKAM. Moreover, there has also been a strong interest in OKAM from other scientific projects such as LarKC, NoTube, SmartProducts, but also from the W3C Incubator and then Working Group on RDF2RDB. See also the Conclusions at the end of this report.

“Community” building to support the sustainability of the OKKAM ENS

From the start of the OKKAM project, it was a clear objective to ensure work beyond the EC funding life of the project. This would require additional investment in cash, IP or knowledge by at least some of the Project Partners into a common new organisation. At the time of writing this report, the OKKAM spin-off and business plan were in the process of being approved by the University of Trento, and the initiative was very well welcomed by another research organisation of Trento (FBK) as well. L3S and DERI also support the creation of the spin-off by committing their IP to the spin-off. Expert System is also expected to assist in the development of enterprise users and application partners. The OKKAM spin-off will sustain the ENS service and the OKKAM API after the project ends and continue development, marketing and maintenance of the software.

Therefore, many actions were undertaken to build contacts with potential partners that could play a possible role to sustain the OKKAN ENS beyond the life of the project. There were also presentations to and meetings with investors as described in section 3 of this report.

Moreover, the IP of the different OKKAM consortium pragmatically can only be transferred to the OKKAM spin-off once it is legally established. The ENS API code was therefore not published yet as open source. Anyway, as mentioned above, the scope to create and nurture a vibrant self-sustaining development community was not there. The ENS was also not yet tested, completed and documented enough during the scope of the project to gain benefit of wide adoption. At the end of the project this situation was actually achieved.

2. Website & Community Portal actions

Rationale of the Website and Portal

A “Community Web Portal” (www.community.okkam.org) was launched in November 2009 in addition to the project website (www.okkam.org).

The community portal (<http://community.okkam.org>) was developed so as to offer an independent platform about the OKKAM ENS systems for those interested in the systems without being interested necessarily in the project as such. The community portal has the following sections:

- Home
- Showcases
- Downloads
- Documentation
- Community functions

The Community Portal was delayed until then for several powerful reasons:

- Firstly, the other Community Building channels were sufficient with the OKKAM.org website (which is accessible to all those interested) was well constructed and visited in attractive numbers;
- The ENS Version 1 which was released earlier in 2009 was not yet fully suitable for public adoption, whereas the ENS Version 2 published in November 2009 was more suitable for adoption at least for avid users.
- The applications developed on top of the OKKAM ENS service in the scientific publishing (Elsevier), news (ANSA) and product information (SAP) areas, were not yet in a position to be “showcased” (rather than just demonstrated), showing benefits, examples, documentation and news that would allow potential users to be convinced; As such there was not yet a “Going Public application” available to be showcased.
- The consortium was still preparing the publication of the ENS versions as Open Source following due consultation within each of the project partners organisations. The Open Source strategy has not yet been implemented as the IP was decided to be transferred to the new OKKAM organisation.

The Community Portal was developed mainly by UNITN on a new Open Source platform in Joomla by with content input from Europe Unlimited.

Statistics & Analytics of the Website and Portal

The basic statistics are the following for www.okkam.org (the project website) over the last year of the project’s life (period July 1, 2009 to June 30, 2010)

- 13,750 visits with 32,980 pageviews by 7,277 visitors with 2,35 average pages per visit

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- Busiest months were October 2009 and February 2010
- The home page represents 37,5% of pageviews
- Search engines were the most important traffic source, on the keyword “okkam”

The basic statistics are the following for <http://community.okkam.org> (the community website) over the last year of the project’s life (period November 2009 to June 30, 2010)

- 2,637 visits with 12,821 pageviews by 1,001 visitors with 4,85 average pages per visit
- Busiest months were February 2010 and April 2010
- The home page represents only 19,1% of page views and the documentation pages were popular with nearly 10% of the pageviews
- The www.okkam.org project website was the most important traffic source alongside the keyword “okkam community”

The number of page visits and documentation page visits shows that the community portal played its function of offering (technical) information on the ENS system on its own.

3. Community dissemination activities

Overview of Dissemination Activities

With respect to our activities aimed at promoting take-up of project outputs, several OKKAM-related dissemination and exploitation activities were (co-)organized by members of the consortium.

These included:

- Presentation at/participation in industry/scientific events
- Presentation at/participation in investor events
- “spin-off development” meetings and leads

These are described in more detail below.

Industry/scientific events/groups

The purpose of these activities were to promote the OKKAM project amongst potential scientific and business partners. This helped to gain a clearer insight into the technical, strategic and marketing position of the OKKAM project and its potential spin-off:

- OKKAM in the W3C RDB2RDF Incubator Group: OKKAM is mentioned in the final report of the W3C RDB2RDF Incubator Group: "The WG must track the evolution of SPARQL and liaise with the DAWG WG as well as the OWL WG. The proposed WG will also keep track of work on assigning unique identifiers to well-known entities such as the ENS system associated with the OKKAM project [OKKAM] and the Common Naming Project started by Neuro Commons"
- OKKAM demo at the 11th Intl. Protégé Conference: The demo of the OKKAM Protege plugin (OKKAM4P) has been accepted at the 2009 Protégé Conference.
- In December 2010, an OKKAM tutorial was performed at the 3rd European Semantic Technology Conference (ESTC2009), organized in Vienna, Austria. A number of leads came out of this.
- A demonstrator based on the first OKKAM WP 9 showcase has been submitted in December 2008 and accepted to the DKOM Demo Jam. This is the most prestigious SAP internal event for high-impact research & development results broadcasted through the corporate intranet to all SAP employees worldwide. The demonstrator has been made available to the SAP community in January 2009.
- Michele Catasta, Richard Cyganiak and Giovanni Tummarello: Towards ECSSE: live Web of Data search and integration. Workshop paper at Semantic Search 2009, Workshop at WWW 2009, Madrid & Keith Alexander, Richard Cyganiak, Michael Hausenblas, Jun Zhao: Describing Linked Datasets. Workshop paper at Linked Data on the Web 2009, Workshop at WWW 2009, Madrid
- OKKAM4P was accepted at the 2009 Protégé Conference. The 11th Intl. Protege Conference was held in Amsterdam on June 23-25, 2009. The demo was developed by Liu Xin.
- OKKAM represented at the 1st Matchmaking event organized by STi Innsbruck, 1st June 2009, Co-located with the European Semantic Web Conference (ESWC) 2009
- OKKAM Presentation at IFIP 2.6 OKKAM was presented at the IFIP 2.6 research workshop in Nicosia, Cyprus. June 24th-25th 2009.
- OKKAM presented at WbDB'2009 workshop. The Workshop was co-located with SIGMOD, in Providence, Rhode Island, USA and took place on the 28th June, 2009

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- Semantic Enrichment of the Scientific Literature symposium Cambridge
- Future of Web Search workshop
- ACDC'09 in Barcelona (15-19 June 2009)
- W3C Shared Names (<http://sharedname.org>) project meeting in Boston
- ISMB 2009, Stockholm
- OKKAM demonstrated at the Dagstuhl meeting on 10 years of Semantic Web
- OKKAM organizes the IJCAI-09 Workshop in Identity and Reference in web-based Knowledge Representation
- Presentation of OKKAM in IBM T.J. Watson Research Center
- Seminar on OKKAM at the Laboratory of Applied Ontology of CNR at Trento
- OKKAM demo at the 11th Intl. Protégé Conference in Amsterdam
- OKKAM and the Word plugin presented at the BioCreative II.5 Workshop
- User evaluation of the "Self-suport for Customer" application at the DSAG 2009 (annual conference of the German-speaking SAP User Group)
- OKKAMizer shown in the VLDB 2009 demo track
- Poster presented at the International Conference on Information Quality 2009 (ICIQ 2009)

Investor events

The purpose was to seek input and contacts as to the models possibly leading to sustainability of the OKKAM project. This helped a lot to write the business plan for the OKKAM spin-off. OKKAM participated actively as a Presenter in a number of targeted investor events:

- Web 3.0 Venture Academy in February 2009 in Brussels, mainly set up as an opportunity for the OKKAM consortium to meet with investors and experts and gather feedback and input on OKKAM technologies, its strengths and weaknesses and on potentially important issues to be considered for the commercialisation strategy and business plan.
- OKKAM presented at the ESA Venture Academy and Investment Forum in Brussels in April 2009
- The OKKAM concept and business plan was presented at the 1st Trentino Technology Tour in October 2009. This allowed for a good promotion of the OKKAM spin-off to the local authorities, the University of Trento as well as FBK as potential founders of the OKKAM spin-off

Partner and business meetings for the potential spin-off

The purpose was to develop and pursue leads for partnerships and contracts which would allow the OKKAM spin-off to thrive following its creation. Therefore, several meetings were organised to allow the OKKAM ENS systems to be implemented once the OKKAM start-up it created:

- OPOCE visit, May 26, 2009. The OKKAM team had the opportunity to present the OKKAM technology and the OKKAM project output to the EU OPOCE Unit. The OKKAM team has been

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hosted by the OPOCE team in Luxembourg at a meeting on May 26, 2009, where the results of the OKKAM as well as of the LARKC projects were presented.

- OKKAM presented to Microsoft Italy in October 2009
- OKKAM Presented to Informatica Trentina and a Tax Pilot workshop was organised with Informatica Trentina
- OKKAM presented at the FAST experts at Microsoft Italia
- OKKAM presented to Engineering spa: The goal of the meeting was to discuss potential collaborations and synergies. Engineering is a group of 17 companies specialized according to market segment or line of business.
- Conference calls with EWI of the Flemish Government, and a meeting in June 2010 as they are working on a new version of FRIS, the "Research and Information Space", where they have some data quality problems, but more importantly, want to publish Open Data using global, unique IDs. They are very convinced of using OKKAM and will include it in the architecture that they are designing this summer.
- Meeting with Synergetics in June 2010 with which an NDA was signed to work on a client proposal
- Meeting with Collibra in December 2009, an award-winning SemTech startup to work on a joint proposal to the Eurostars funding program with deadline September 2010. It will be mainly on enabling instance level data integration using Smart Identifiers in their data governance platform. They will provide the customer use case, we provide the innovative twist to their existing technology.
- Meeting with the Commission, DG.INFSO BXL, Future Internet-Public Private Programme head - Collected positive general feedback that OKKAM could be useful in the program. Received some contacts of forming consortia which to address in a focused campaign.
- OKKAM presented at IKS which is a company based in Padua (Italy), leader in IT governance and security at a national level.
- OKKAM presented to 2 senior managers from Accenture (Milan, Italy) who visited Trento to meet a few selected research projects. The meeting was organized by the Trentino's IT company Informatica Trentina.
- Angela Fogarolli, from the UNITN team, visited the city of Manor to work on a pilot which uses the OKKAM ENTity Name System for empowering the use of QR-codes in eGovernment applications
- The OKKAM coordinator discussed with the representatives of Elsevier in the ORCID initiative about potential collaborations
- The OKKAM concept and solution presented by Paolo Bouquet at a group of about 20 managers from Vodafone Italia in Milan
- In occasion of an official visit of a Israeli delegation to Trento organized by Telecom Italia on the 30 June 2010, the OKKAM initiative was presented at the representatives of Telecom Italia and their guest companies
- OKKAM was mentioned in a meeting with European Commissioner Geoghegan Quinn as one of 12 recommendations to include in the planned "Innovation Union" in an Informal meeting with her on 5 July 2010 – See also the annexe to this report.

Conclusions and recommendations

As a conclusion going forward, we feel that the OKKAM spin-off will need to build community interest around specific use cases of the OKKAM ENS in which it gain sufficient visibility, critical mass of being a solutions provider of choice in a targeted market niche or segment; it will have to be selective in pursuing not too many segments but rather one of two initially.

It is far easier and far more cost effective to set up the OKKAM organisation centered around a small, very clearly defined Niche Market than it is to try to start by breaking into a large 'mass market'. It is easy to understand why a carefully identified and narrowly defined niche is so much more attractive:

- one will use less effort, but get much greater results
- one will have fewer leads to chase, and they will be much more qualified
- the defined niche will clarify future needs and developments – no more guess work
- one can achieve greater profits from reduced expenses & more efficient sales work
- will gain a unique identity which others can easily understand and find while searching for your company and products

The niche must be MANAGEABLE which means that:

- The companies or consumers must be ACCESSIBLE
- Companies or consumers must be easily IDENTIFIABLE & possible to locate, i.e. you are able to locate special groups, organizations, clubs, or associations that they belong to. If you cannot find them, then you cannot sell to them

From the current use cases which the OKKAM spin-off is working on, some do potentially represent an attractive niche:

- the Tax Agency in Trentino or the City of Manor in Texas (City or Provincial information systems)
- the AGRIS digital library with FAO (digital libraries)
- the Research Information Systems portal of the Flemish Government, the portal of the University of Trento (research information systems)

As a matter of example, Europe Unlimited included in some recommendations to the European Commissioner for Research & innovation Mrs Geoghegan Quinn the need for more open & smart research information systems – these recommendations built upon the last prospect mentioned above with the Flanders research Information Space.

The Recommendation mentions OKKAM explicitly and can be found in Annex.

Annex – Extract of recommendations towards European Commissioner Geoghegan-Quinn

Executive Summary

Members of the Informal Panel

- 1) Diogo Vasconcelos, Cisco 2) Ann Mettler, Lisbon Council 3) Marc Van Gastel, Deloitte 4) John Kao, Institute of Large Scale Innovation 5) Geoff Mulgan & Simon Tucker, The Young Foundation
6) Luc Soete, UNU-MERIT 7) Julia Prats, IESE Business School 8) Patrice Cros, Premier Cercle
9) Jos Peeters, Capricorn Venture Partners 10) William Stevens, Europe Unlimited

Goal of the Informal Panel

Propose informal, but concrete high-impacting ideas for EU initiatives that will boost innovation in Europe with the aim of bringing this to the attention of EC Commissioner Mrs. Geoghegan-Quinn. The initiatives should be ambitious and ground-breaking but implementable at European level by the EC and the European institutions.

12 Impactful Innovation Ideas

12 impactful ideas have been worked out in short papers. A short summary of each is set out below:

- What main challenge is to be addressed?
- What is the action proposed?
- What impact can be expected?

1. ***Launch 4i Funds (funds for international institutional investment into innovation)***

- Institutional investors cannot invest in our future growth as venture capital remains fragmented
- Launch large specialized funds with EC and EIB/EIF backing to attract long-term private capital
- Leverage existing venture capital initiatives to back the best companies to grow into global leaders

2. ***Fast-Track Smaller Companies into the Research Programmes***

- The target of 15% of Framework Programme Funding is below the innovation potential of SMEs
- Set a much higher target for FP8 and ensure that access conditions are fit for SMEs
- Get more innovation, prototypes and jobs out of the FP funding by increased SME participation

3. ***Open smarter Research Information systems***

- Knowledge transfer is weak as data on publicly-funded research results is poor and closed
- Programme the best solutions for making research information systems more open and smart
- Get more excellence and knowledge transfer out of the already funded research across Europe

4. ***Network for Open Innovation in Europe***

- Open innovation remains too much of a concept and not enough of a practice in Europe
- Develop a roadmap for more and better open innovation practices
- Foster more collaboration and knowledge transfer across stakeholders

5. Encourage the Innovation Strategy of SMEs

- Not enough SMEs are deploying sound strategies for future innovation
- Incite ERDF and Cohesion funds to co-invest in the innovation plans of small businesses
- The potential of job creation is enhanced by backing the future business of SMEs

6. Bring together a public sector innovation leadership academy

- As innovation is high on the agenda, the weight rests on the shoulders of public sector leaders
- Bring together a learning experience and network for public sector innovation leadership
- Allow public sector innovation leaders to be more effective as inspired by better practices

7. Incite better innovation partnerships for ERDF and cohesion funds

- The Structural and Cohesion funds earmarked for innovation fall short of their investment targets
- Consider a “RSFF-type” partnership between ERDF and the EIB to roll out innovation investments
- Increase the effectiveness of structural funds in contributing to innovation cohesion and growth

8. Stimulate universities and higher-education to innovate

- European universities and higher education do not contribute enough to innovation and growth
- Assess how the governance and funding of these education systems can incite innovation
- More diversity, accountability and private funding will lead to a more effective societal contribution

9. Market Intellectual Property vigorously

- While the EU patent will help, Intellectual Property attitudes and practices must improve
- Launch a programme to bring together actors, knowledge and IP with industry and SMEs
- Increase IP asset creation and take up dramatically, also of FP results

10. Make space for social innovation collaboration

- The public or social sector and civic society are under great pressure to do “more with less”
- Create physical & virtual spaces where new models, projects & enterprises can be piloted
- Offer a range of tested solutions to unlock the innovation potential of the public sector at large

11. Inject innovation into public procurement

- As public procurement amounts to 17-18% of EU GDP, its innovation potential is great
- Develop a common European procurement policy for innovation and a “SBRI-type” system
- Procuring more innovation can rapidly and massively lead to better citizen solutions and more jobs

12. Invest now in the smart infrastructure of the future

- Europe is still investing in bricks & mortar and not enough in the infrastructure of the future
- Assess how MS can invest more with the EIB in high speed fiber networks and smart grids
- Raise jobs and productivity in the short-term and competitiveness and well-being in the mid-term

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idea 3

Open smarter Research Information systems



- Knowledge transfer is weak as data on publicly-funded research results is poor and closed
- Programme the best solutions for making research information systems more open and smart
- Get more excellence and knowledge transfer out of the already funded research across Europe

Author: *William Stevens*
Europe Unlimited

TOPIC	Description
CHALLENGE	<ul style="list-style-type: none"> • The availability, data management and accessibility of information on completed, ongoing or upcoming research activities across Europe's countries and regions, including the EU Framework Programmes can be improved. • The legacy and functionality of existing research information systems is such that research data are not very open, linked or inter-operable. As a consequence, the knowledge developed by our public research organizations is insufficiently made available or transferred to those needing access. • Even the maintenance of current research information systems is very costly as the architectures are typically closed enterprise systems or proprietary portals. • The EU Framework Programmes also have a poor record, figuratively and literally, of transferring research into knowledge or innovation. • As "open innovation" depends on the availability of research knowledge, the poor architecture of research information systems severely hampers the productivity of research activities and obviously also the transfer of knowledge to different stakeholders, sectors or regions. • Publication of research knowledge is too much a domain reserved to proprietary scientific channels where the knowledge is not sufficiently open, even to those producing it, let alone to the wide business community and the small and medium-sized enterprises in particular.
ACTION	<ul style="list-style-type: none"> • We need public research data systems that are more open. This is part of a general trend to make better use of available public data and digital libraries. Obviously, this is particularly important for the knowledge development by public research organizations and programmes and the EU Framework Programmes in particular. • Good availability and accessibility of research information is essential for the entrepreneur, policy maker, research funder and obviously the researcher. For this, it is critical to make research knowledge smarter, by a willingness to use advanced technologies such as digital identifiers and semantic technologies <p>There are great examples which demonstrate that an initiative by the EC could push developments over a tipping point towards better and smarter research knowledge across Europe:</p> <ul style="list-style-type: none"> • EWI, the Flemish government Economy, Science and Innovation department is developing a Research Information architecture according to the principles and strategy outlined in the FRIS, Flanders Research Information Space. See www.Researchportal.be for information on 18,000!! (thousands) research projects, 18,000 researchers from 3,400 research units across Flanders. The major driver behind the FRIS programme is the need for the creation of adequate infrastructure that will support actors and processes in a Knowledge Society and allow for the transformation to an Open Innovation system. • Ten years ago the EEC supported a initiative which resulted in the CERIF recommendation to member states and the establishment of euroCRIS (www.eurocris.org) to develop, promote and maintain it. CERIF is now used widely in many European countries and its coordinated development would benefit greatly from another injection of EC support and funding. CERIF already incorporates technology to handle consistently unique identifiers and semantics. • The European Integrated Project OKKAM, led by Trento University and euroCRIS projects such IST-World and Cistrana provide clear initial directions for this. The required outcome will link existing open data available via the web or from digital libraries utilizing the formal bases of CERIF so as to provide a better knowledge picture on specific research projects, research groups or specialized knowledge areas throughout Europe.

	<ul style="list-style-type: none"> • The further development of research information systems in a European wide context using CERIF has been recommended by euroHORCS, as a requirement of the current tender for the ERC administration and is being pursued actively in most EU member states. Without a European mandate and support for coordination, possible diversification at the national level would precluded a European consistent view of research activity. • The Dutch government as well as important UK and Italian university networks are already known to be interested in such an approach. <p>In summary, there is evidently a clear opportunity to launch concrete and efficient actions assisting regional, national and EU research programmes and research information system initiatives allowing their research knowledge to be more open and smart.</p>
IMPLEMENTATION	<p>The European Commissions' Research Directorate should call for and fund an ambitious programme (EUR 50-75 Million over 3 years) for an "open and smarter public research information space", with the following components:</p> <ul style="list-style-type: none"> • Offers a platform for exchange of better practice of those representatives of regional, national and EU wide initiatives seeking solutions together with specialists and solutions providers and strengthen the euroCRIS platform; • Makes recommendations to EU-based research information systems managers how digital identifiers, enhanced standards, system inter-operability and semantic technologies can enhance existing or new data systems with smarter and more open system specifications; • Supports a number of advanced pilot projects linking research information systems at cross-border level and opening data systems with added functionality, involving users, in particular small and medium-sized enterprises (SMEs); • Compiles and offers selected open-source web-based systems and tools (video and presentation publication tools, citation referencing,...) which public researchers and their public organizations can use to enhance their publication and dissemination efforts; • Promotes better practice amongst researchers for the publication and dissemination of their research activities and results.
IMPACT	<p>The programme would have the following impact:</p> <ul style="list-style-type: none"> • Vastly improving the publication and dissemination of EU Framework Programme's research project activities and results (and research activities in the EU at large) and this without increasing existing budgets ; • As more results will be published, citations and referencing of existing research results will equally increase, accelerating the availability and dissemination of research knowledge; • Finally, the productivity as well as the excellence of research activities would increase by avoiding duplication of specific research actions and results

APPENDICES

Document references

<http://www.researchportal.be/en/index.html>
www.okkam.org
<http://www.driver-repository.eu/>
<http://www.cineca.it/en/index.htm>