

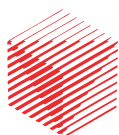
ERCIM

European Research Consortium
for Informatics and Mathematics

Cooperating for Excellence in Research

Activity Report 2013

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ERCIM – the European Research Consortium for

Informatics and Mathematics – aims to foster collaborative work within the European research community and to increase cooperation with European industry. In 2013, the members of ERCIM included leading research establishments from 22 European countries. Encompassing over 12 000 researchers and engineers, ERCIM is able to undertake consultancy, development and educational projects on any subject related to its field of activity. ERCIM was founded in 1989 and is a European Economic Interest Grouping (EEIG). In 2011 ERCIM established an international association carrying out all research, networking, and support activities of ERCIM.

What is ERCIM?

ERCIM aims to foster collaboration within the European ICST research community and to increase cooperation with industry. Its members are centres of excellence across Europe. ERCIM is internationally recognized as a major representative organization in its field. ERCIM provides access to all major ICST research groups in Europe and has established an extensive program of working groups, publications, fellowships and prizes. It also hosts the European branch of the World Wide Web Consortium (W3C).

ERCIM, a consortium of leading research institutions, was restructured in 2011 and 2012 and has opened its doors to new members. ERCIM focuses on information and communication science and technology (ICST) and related areas of mathematics and has a successful track record of promoting ICST research and cooperation in Europe and beyond. Membership was previously restricted to one member per country, but that limit is now being lifted to allow applications from more top level research institutions (including universities) in ICST from each country.

Objectives

ERCIM's aim is to play a leading role in Information and Communication Technology in Europe by:

- building a Europe-wide, open network of centres of excellence in ICST and Applied Mathematics.
- excelling in research and acting as a bridge for applications
- being internationally recognised both as a major representative organisation in its field and as a portal giving access to all relevant ICST research groups in Europe
- liaising with other international organisations in its field
- promoting cooperation in research, technology transfer, innovation and training.

Members

Member institutes must be leading research establishments with excellent links to both the national and international, academic and commercial research communities. All current ERCIM members are national centres of excellence, independent of specific commercial ties. They have a strong involvement in the research programs of the European Union and their country, and joint projects with both small and medium-sized enterprises and large industrial companies.

Benefit of Membership

ERCIM is a European-wide network internationally recognized as a representative organisation in its field so members can benefit from easy access to all major ICST research groups in Europe. Members can take part in all ERCIM activities including research projects, Working Groups or in the PhD fellowship programme supported by the European Union. They also benefit from ERCIM's privileged partnership with standardisation bodies such as W3C.

International Cooperation

ERCIM considers it a high priority to develop cooperation with scientists all over the world. ERCIM hosts the European branch of the World Wide Web Consortium (W3C), the unique international standardization body which sets the Web standards and protocols (HTML, HTTP, XML, etc.) since 1994. ERCIM participates in EU activities and projects. ERCIM has also established cooperation with ETSI, the European Telecommunications Standards Institute and with the European Mathematical Society. ERCIM is also participating in the European Forum for ICST (EFICST). Its objective is to have a stronger, unified voice for ICST professionals in Europe.

Consultancy

ERCIM experts have been involved in many advisory bodies convened by the European Commission. Additionally, ERCIM senior researchers are participating in several EC-funded roadmapping projects as partners, invited participants or members of advisory boards.

Research Projects

In addition to many projects involving ERCIM member institutes, ERCIM is itself participating in several European Commission related activities and projects as coordinator or partner. In these projects, several member institutes carry out the research while the ERCIM Office takes care of administrative and financial tasks.

Working Groups

Working Groups are specialist networks set up by researchers, within which the ERCIM partners arrange regular workshops with invited external participation to study a specific topic and prepare international research projects.

Innovation

In addition to research in computer science and mathematics, innovation and transfer of research results is one of the ERCIM institutes' current main assignments. ERCIM members play a pioneering role in creating small and medium-sized high-tech companies, an effective way of achieving such a transfer. In addition, ERCIM members have a long track record of cooperation with European industry in R&D projects, generally within the framework of European programmes. As a network, ERCIM can help industrial partners to locate the best scientific teams in Europe for a given domain.

Cor Baayen Award

Each year, ERCIM presents a promising young researcher in computer science and applied mathematics with the prestigious Cor Baayen Award.

Publications

ERCIM publishes the quarterly magazine 'ERCIM News' and policy documents.

The ERCIM community is supported by a Consortium of two bodies:

- ERCIM AISBL an international non for profit association under Belgian law, carrying on the activities of ERCIM concerning collaborative research, networking, and support.
- ERCIM EEIG, the European Economic Interest Grouping, responsible for managing the ERCIM Office and hosting the European branch of W3C.

ERCIM Association

The ERCIM association is managed by the Board of the Association. In 2013, the board was composed of:

- Domenico Laforenza, IIT-CNR, Italy: President:
- Chrisos Koulamas, ISI,Greece: Treasurer
- Jerzy Tiuryn, University of Warsaw, Poland: Secretary

and in addition:

- Dimitris Plexousakis, Institute of Computer Science, Foundation for Research and Technology (FORTH) – Hellas, Greece, co-responsible for scientific aspects (working groups, etc.)
- Claude Kirchner, Inria, France, responsible for human capital
- Andreas Rauber, AARIT, Austria, responsible for outreach activities.

The majority of these board members lead a task group consisting of ERCIM member representatives or substitutes.

ERCIM EEIG

The ERCIM EEIG is governed by the EEIG Board of Directors. In January 2014 the board was composed of:

- Jos Baeten (Vice-President of the EEIG), CWI
- Michel Cosnard, Inria (President of the EEIG)
- Matthias Jarke, Fraunhofer-Gesellschaft
- Domenico Laforenza, CNR
- Juan Bicaregui, STFC
- Constantine Stephanidis, ICS-FORTH

and its activities were carried out by an Executive Committee composed of:

- Thomas Bendig, Fraunhofer Gesellschaft
- Dick Broekhuis, CWI (chair)
- Michel Loyer, Inria
- Brian Matthews, STFC
- Dimitris Plexousakis, FORTH
- Fausto Rabitti, CNR



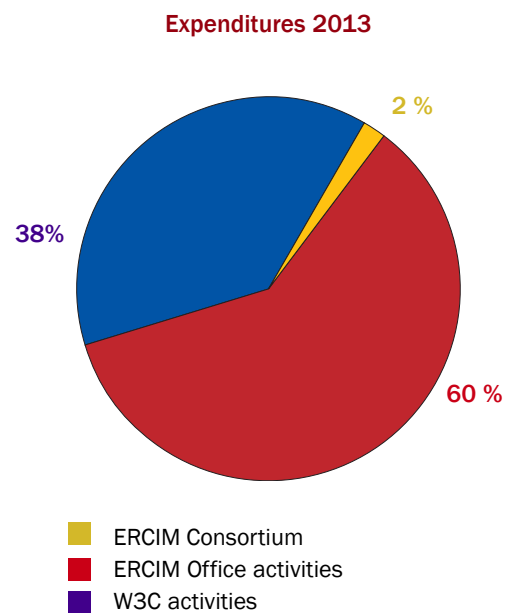
Domenico Laforenza, ERCIM President

Throughout 2013 ERCIM traded as a consortium consisting of ERCIM EEIG and ERCIM AISBL. ERCIM operated with a gross turnover of 10 M€.

56% of these funds came from EU funding of projects which was either disbursed to partners in consortia or held over for disbursement in the next year.

Expenditures

ERCIM Consortium activities	174 k€ (2%)
ERCIM Office activities	6.096 k€ (60%)
W3C Europe activities	3.805 k€ (38%)
<hr/> Total	<hr/> 10.075 k€



*Dick Broekhuis, CWI,
ERCIM EEIG Execom chair*



A major activity within the scope of the Association's mission is related to the promotion of excellence in research and the maintenance of a strong portfolio of scientific activity, materialized in the form of ERCIM-led and coordinated joint research projects and ERCIM-hosted Working Groups. The Science Task Group aims to enable, encourage, sustain and coordinate scientific activities in the form of collaborative research projects and working groups in areas of ICST and Mathematics within which significant research activity is taking place at Institutions within and beyond ERCIM.

The Science Task Group is therefore divided into two subtasks:

- Working Groups for building and maintaining a strong network of ERCIM researchers in the different scientific fields of competence of ERCIM.
- Projects for stimulating the submission of ERCIM-led strategically relevant projects and for helping to define the topics for the yearly ERCIM Conference

The members of the Science Task Group in 2013:

Co-Chairs :

- Dimitris Plexousakis, FORTH, subtask "Working Groups"
- Patrick Furrer, SIRA, subtask "Projects"

Members:

- Manuel Carro, SPARCIM
- João Falcão e Cunha, PEG
- Michel Loyer, Inria
- Leszek Pacholski, PLERCIM
- Jean-Jacques Quisquater, FNRS
- Fausto Rabitti, CNR
- Niklas Rudemo and Janusz Launberg, SICS
- Julius Stuller, CRCIM
- Pierre Guisset, Philippe Rohou, Jérôme Chailloux, ERCIM Office

The Science TG can be contacted at tg-science@ercim.eu



*Dimitris Plexousakis, ICS-FORTH (left)
and Patrick Furrer, SIRA,
chairs of the ERCIM Science Task Group*

The activities of a Working Group can be divided into several areas: workshops to build the community and maintain its vibrancy, projects designed to advance research and innovation in the particular area of the group, and human mobility to assure the appropriate trained human capital. ERCIM provides some financial support to the Working Groups.

A major activity of an ERCIM Working Group is to search actively for project funding that crosses national borders.

ERCIM Working Groups contribute many of the articles in ERCIM News and commonly provide scientific coordination for the special theme sections. They also participate in the production of ERCIM strategic reports.

Computational and Methodological Statistics

The Working Group Computing and Statistics focuses on all computational aspects of statistics. Of particular interest is research in important statistical applications areas where both computing techniques and numerical methods have a major impact. The working group gathers over 300 members and is organised in eleven specialized tracks. The aim is twofold: first, to consolidate the research in computational statistics that is scattered throughout Europe; second to provide researchers with a network from which they can obtain unrivalled sources of information about the most recent developments in computational statistics and applications. Emphasis is put on computational methods with computational statisticians being the primary target of the WG.

Coordinator:

Erricos Kontoghiorghes, School of Computer Science and Information Systems, Birkbeck, University of London

Organised event:

6th International Conference of the ERCIM WG on Computational and Methodological Statistics (ERCIM 2013), and 7th International Conference on Computational and Financial Econometrics (CFE 2013), London, 12-16 December 2013.

<http://www.cmstatistics.org/ERCIM2013/>

The purpose of an ERCIM Working Group is to build and maintain a network of ERCIM researchers in a particular scientific field. The Working Groups are open to any researcher in the specific scientific field.

Working Groups with activities in 2013

- Computational and Methodological Statistics
- Dependable Software-Intensive Embedded Systems
- Environmental Modelling
- E-mobility
- Formal Methods for Industrial Critical Systems
- Multimedia Understanding through Semantics Computation and Learning - MUSCLE
- Security and Trust Management
- Software Engineering for Resilient Systems

Dependable Software-Intensive

Embedded Systems

Dependable embedded software-intensive systems technology challenges are addressed with topics on current research, solutions, examples, professional and academic education, and training. Dependable systems are systems that can justifiably be relied on throughout the complete life cycle and under all possible conditions of use. System attributes comprise safety, reliability, maintainability, survivability, availability and security, their relative impact and implementation depending on the application. The ERCIM Working Group 'Dependable Software-Intensive Embedded Systems' organised several exhibitions and events where ERCIM was promoted.

Coordinators:

Erwin Schoitsch, Austrian Research Centers/AARIT and Amund Skavhaug, NTNU

Organised events:

ERCIM/ARTEMIS/EUROMICRO Special Workshop-Session on Teaching, Education and Training for Dependable Embedded and Cyber-physical Systems, Santander, Spain, 4-6 September 2013 and ERCIM/EWICS/ARTEMIS Workshop on Dependable Embedded and Cyber-physical Systems (DECS) at SAFECOMP 2013

<http://www.ercim.at/>

E-mobility

The ERCIM eMobility working group aimed to develop strategic basic research agenda and project proposals in the area of eMobility. To complement the activities of the former eMobility European Technology Platform (now called Net!Works ETP), the working group focused on more (theoretical) basic research issues. The group was disbanded by the end of the 2013.

Coordinator:

Torsten Braun, University of Bern/SIRA

Organised events:

- Second joint ERCIM eMobility and MobiSense Workshop on Wired/Wireless Internet communications, 4-7 June 2013, St Petersburg, Russia

<http://wiki.ercim.eu/wg/eMobility/>

Environmental Modelling

The ERCIM Working Group Environmental Modelling has the objective of promoting the cooperation and the research activities of groups working in the field of environmental modelling and simulation at ERCIM institutes. Current research themes include parallel, distributed and Grid computing, knowledge from data, decision support, intelligent/adaptive user interfaces and visualization, standardization of metadata and system interfaces, workflows for automatic access to distributed resources, and the generic nature of information and simulation systems.

Coordinator:

Steffen Unger, Fraunhofer FOKUS

<http://ercim.fokus.fraunhofer.de>

Formal Methods

for Industrial Critical Systems

Formal methods have been advocated as a means of increasing the reliability of systems, especially those which are safety or business critical, but the industrial uptake of such methods has been slow. This is due to the perceived difficulty of mathematical nature of these methods, the lack of tool support, and the lack of precedents where formal methods have been proven to be effective. It is even more difficult to develop automatic specification and verification tools due to limitations like state explosion, undecidability, etc. The FMICS Working Group brings together researchers of the ERCIM consortium and beyond in order to promote the use of formal methods within industry.

Coordinator:

Radu Mateescu, Inria

Organised event:

FMICS 2013 - 18th International Workshop on Formal Methods for Industrial Critical Systems, Madrid, 23-24 September 2013

<http://www.inrialpes.fr/vasy/fmics/>

Multimedia Understanding through Semantics Computation and Learning

- MUSCLE

MUSCLE (formerly Image and Vision Understanding) is the ERCIM Working Group on multimedia understanding through semantics, computation and learning. It gathers teams from both ERCIM and non-ERCIM institutions whose expertise ranges from machine learning and artificial intelligence to image, video and audio processing, and multimedia database management. The group is closely collaborating with ibai-publishing (www.ibai-publishing.org) which provides open-access journals in the fields of Data Mining, Case-Based Reasoning, and Mass Data Analysis of Signals and Images.

Coordinator:

Emanuele Salerno, ISTI-CNR

Organised event:

MUSCLE international workshop on computational intelligence for multimedia understandings, Antalya, Turkey, 3-4 October 2013.

<http://wiki.ercim.eu/wg/MUSCLE>

Security and Trust Management

The ERCIM Working Group Security and Trust Management aims at focussing the research of the ERCIM institutions on a series of activities, for example projects and workshops, to foster the European research and development on security, trust and privacy in ICST.

The Working Group provides a best PhD thesis award to promote the scientific growth of young researchers interested in the field of security and trust management. The 2013 award was given to Carmela Troncoso, for her thesis "Design and analysis methods for privacy technologies"

Coordinator:

Pierangela Samarati, University of Milan

Organised event:

9th International Workshop on Security and Trust Management (STM'12), Egham, UK, 12-13 September 2013, co-located with the European Symposium on Research in Security and Privacy (ESORICS 2013)

<http://www.iit.cnr.it/STM-WG>

Software Engineering for Resilient Systems

The Software Engineering for Resilient Systems (SERENE) Working Group considers resilient systems as open and distributed systems that can dynamically adapt in a predictable way to unexpected events. Engineering such systems is a challenging issue still not solved. Achieving this objective is a complex task since it implies reasoning explicitly and in a combined way, on system's functional and non-functional characteristics.

The SERENE working group focuses on formal, semi-formal modeling of resilience properties; frameworks and design patterns for resilience; error handling and fault handling in the software life-cycle; re-engineering for resilience; component-based development and resilience; software development processes for resilience; resilience through exception handling in the software life-cycle; atomic actions; fault-tolerance; dynamic resilience mechanisms; resilience prediction; resilience metadata; reasoning and adaptation services for improving and ensuring resilience; intelligent and adaptive approaches to engineering resilient systems; engineering of self-healing autonomic systems; dynamic reconfiguration for resilience; run-time management of resilience requirements; verification and validation of resilient systems; CASE tools; Model Driven Engineering; software architectures for resilience.

Coordinator:

Didier Buchs, University of Geneva (SIRA)

Organised event:

5th International Workshop on Software Engineering for Resilient Systems, Kiev, 3-4 October 2013 .

In 2013, ERCIM participated in eighteen research projects funded by the European Commission either as coordinator or as a partner. Within these projects, ERCIM institutes and their partners carry out joint research activities, while the ERCIM Office carries out the administrative and financial coordination.

Ensuring the management of common research projects is a real asset, and this activity has become increasingly important for the ERCIM Office, which is dedicating considerable effort to the administrative and financial coordination of European projects. Relying on an experienced team, the Office has a full range of expertise from the identification of funding opportunities to the development of project ideas, the finding of project partners, proposal writing, contract negotiation, project dissemination and project management. This is a key success factor, allowing research teams to focus on the scientific tasks at the core of each project.

Coordinating several projects, ERCIM has witnessed the emergence of a growing number of research initiatives involving strong interdisciplinary activities. If this has been a growing trend over the year, the European research projects now go a step further with the integration of advanced information and communication science and technology (ICST) to other domains.

*Overview of projects with
ERCIM participation in 2013*

Project acronym	ERCIM's role	ERCIM members/partners involved
ABCDE	coordinator	all ERCIM members
AXES	coordinator	Katholieke Universiteit Leuven (FNRS/FWO), Inria, Fraunhofer IAIS
COMPOSE	partner	W3C, Fraunhofer FOKUS
CROSSOVER	partner	W3C
D-CENT	partner	W3C
eAccess+	partner	W3C, CNR, Fraunhofer FIT
Global ITV	partner	W3C, Fraunhofer FOKUS
HTML5Apps	coordinator	W3C
iMarine	coordinator	CNR, FORTH
LIDER	partner	CNR, FORTH
MediaScope	partner	W3C
PaaSage	coordinator	STFC, Inria, FORTH
SERENOA	partner	W3C, CNR, Université catholique de Louvain (FNRS/FWO)
Smart Open Data	partner	W3C, UPM (SpaRCIM)
STREWS	coordinator	W3C, Katholieke Universiteit Leuven (FNRS/FWO)
VOICES	coordinator	W3C
WAI-ACT	coordinator	W3C, Fraunhofer FIT
WEBINOS	coordinator	W3C, Fraunhofer FOKUS



ERCIM Alain Bensoussan Fellowship Programme

ABCDE

Since September 2010, the “ERCIM Alain Bensoussan Fellowship Programme” is co-funded by the FP7 Marie Curie Actions - People, Co-funding of Regional, National and International Programmes (COFUND) of the European Union. This financial support is available for a period of five years. With this support ERCIM plans to co-fund more than 160 fellow-years over the five-year period in hosting institutions member of ERCIM throughout Europe. Topics cover all disciplines in computer science and applied mathematics.

The impact of this co-funding is a considerable increase in the number of ERCIM fellows per annum compared to the previous Fellowship Programme established in 1991. Also, the duration of the fellowships has been extended so that applicants can benefit from one or two periods of twelve months spent in one or two ERCIM member institutes. Additionally, employment conditions were improved, with the option of signing working contracts instead of stipend agreements.

Another important novelty was the annual “ABCDE seminar” where fellows had the opportunity to benefit from specific training on a range of non-scientific skills. On 30 April 2013, the last ABCDE call was organised. The results of the last round was very promising. 301 applications have been submitted, 41 fellow-years have been granted after the selection process to 41 fellows during this period. For this last and unic call, tt corresponds to 492 expected person months.

The third ABCDE seminar was held on 31 October - 1 November 2013 in Athens, Greece, in conjunction with the ERCIM fall meetings. The seminar was attended by 49 fellows and featured topics such as personal development courses, IPR issues, communications techniques.

The high number of awarded fellows is one criteria to measure the success of this programme. Another important impact of the “COFUND” support is that the fellowship programme has significantly widened its scope. ERCIM attracted highly talented people. Scientific cooperation among fellows and research institutes across Europe has been largely developed with the ABCDE project.

ABCDE - Alain Bensoussan Career Development Enhancer is supported by the Marie Curie Co-funding of Regional, National and International Programmes (COFUND) of the European Commission"

EC funding: €3.500,000

ERCIM's role:

ERCIM EEIG project coordinator

ERCIM members involved:

all ERCIM members

Coordinator:

Philippe Rohou, ERCIM Office

Duration:

September 2010 to August 2015

<http://fellowship.ercim.eu>

ABCDE seminar participants



AXES

The AXES project will develop tools that provide various types of users with new engaging ways to interact with audiovisual libraries, helping them discover, browse, navigate, search and enrich archives. In particular, apart from a search-oriented scheme, we will explore how suggestions for audiovisual content exploration can be generated via a myriad of information trails crossing the archive. This will be approached from three perspectives (or axes): users, content, and technology.

Within AXES innovative indexing techniques are developed in close cooperation with a number of user communities through tailored use cases and validation stages. Rather than just starting new investments in technical solutions, the co-development is proposed of innovative paradigms of use and novel navigation and search facilities. We will target media professionals, educators, students, amateur researchers, and home users.

Based on an existing Open Source service platform for digital libraries, novel navigation and search functionalities will be offered via interfaces tuned to user profiles and workflow. To this end, AXES will develop tools for content analysis deploying weakly supervised classification methods. Information in scripts, audio tracks, wikis or blogs will be used for the cross-modal detection of people, places, events, etc., and for link generation between audiovisual content. Users will be engaged in the annotation process: with the support of selection and feedback tools, they will enable the gradual improvement of tagging performance.

AXES technology will open up audiovisual digital libraries, increasing their cultural value and their exposure to the European public and academia at large. The consortium is a perfect match to the multi-disciplinary nature of the project, with professional content owners, academic and industrial experts in audiovisual analysis, retrieval, and user studies, and partners experienced in system integration and project management.



AXES - Access to Audiovisual Archives is an “Integrated Project” supported by the European Commission under the 7th Framework Programme

EC funding: €5.900,000

ERCIM's role:

ERCIM EEIG project coordinator

ERCIM members involved:

Katholieke Universiteit Leuven (FNRS/FWO), Inria, Fraunhofer IAIS

Scientific coordination:

Tinne Tuytelaars, Katholieke Universiteit Leuven

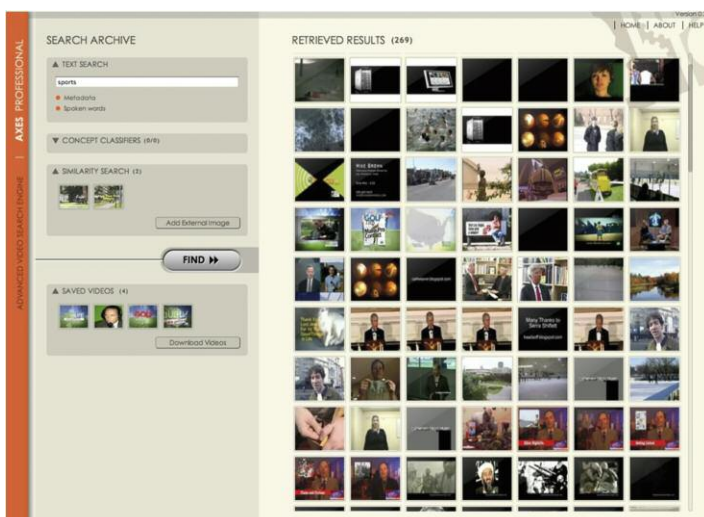
Administrative Coordinator:

Philippe Rohou, ERCIM office

Duration:

January 2011 to March 2015

<http://www.axes-project.eu>



Screen shot of ‘AXES-lite’, a first prototype of what will eventually be the AXES-PRO system. AXES-lite allows keyword-based search as well as similarity search (search by example). The keyword-based search is not limited to searching the metadata or ASR output, but also allows searching the visual content.



COMPOSE

The vision of the COMPOSE project is to advance the state of the art by integrating the Internet of Things and the Internet of Content with the Internet of Services through an open marketplace, in which data from Internet-connected objects can be easily published, shared, and integrated into services and applications. The marketplace will provide all the necessary technological enablers, organized into a coherent and robust framework covering both delivery and management aspects of objects, services, and their integration.

- Object virtualization: enabling the creation of standardized service objects;
- Interaction virtualization: abstract heterogeneity while offering several interaction paradigms;
- Knowledge aggregation: creating information from data;
- Discovery and advertisement: of semantically-enriched objects and services;
- Data Management: handle massive amounts and diversity of data/metadata;
- Ad hoc creation, composition, and maintenance: of service objects and services;
- Security, heterogeneity, scalability, and resiliency: incorporated throughout the layers.

COMPOSE strives for a strong impact on a developing market by lowering barriers to develop, select, combine, and use IoT-based standardized value added services. This will be achieved by providing a complete ecosystem, and having it adopted by enterprises, SMEs, government-related bodies, and individual developers and end-users.

The COMPOSE design, development, and validation will be based on innovative use cases highlighting different aspects of the platform. Among the use cases are:

- Smart Shopping Spaces
- Smart City (Barcelona)
- Smart Territory (Trentino).

COMPOSE - Collaborative Open Market to Place Objects at your Service

EC funding: €5.356,000

ERCIM's role:

ERCIM EEIG project partner

ERCIM members involved:

W3C (ERCIM EEIG), Fraunhofer FOKUS

Scientific coordination:

Benny Mandler, IBM Research, Israel

Duration:

November 2012 - October 2015

<http://www.compose-project.eu/>



CROSSOVER



Bridging communities for next generation policy-making is the overall goal of the CROSSOVER coordination and support action. In an increasingly interdependent, unstable and complex world, policy-makers lack the tools to anticipate emerging problems and the impact of possible solutions. At the same time, citizens are becoming more vocal in monitoring and influencing policy decisions. Emerging ICST tools for governance and policy modelling show great opportunities for decision-making in a complex world, through the dramatic and combined growth of data availability, analysis and simulation tools, participative and behavioural change technologies. However, they still remain at the margins of policy-making: research and deployment are fragmented between academic fields, policy domains, geographical areas, technological layers and type of stakeholders. As a result, resources are spent in “reinventing the wheel” and reach sub-optimal efficiency and effectiveness.

The CROSSOVER project aims to consolidate and expand the existing community (built largely within FP7) by:

- Bringing together and reinforcing the links between the different global communities of researchers and experts: it will create directories of experts and solutions, and animate knowledge exchange across communities of practice both offline and online;
- Reaching out and raising the awareness of non-experts and potential users, with special regard to high-level policy-makers and policy advisors: it will produce multimedia content, detailed case studies, roadmap, workshops and high-level policy conference with competition for a prize;
- Establishing the scientific and political basis for long-lasting interest and commitment to next generation policy-making, beyond the mere availability of FP7 funding: it will focus on use cases and a demand-driven approach, involving policy-makers and advisors in high-level conference.

CROSSOVER will pursue this goal through a combination of content production, ad hoc and well-designed online and offline animation; as well as strong links with existing communities outside the CROSSOVER project and outside the realm of eGovernment.

CROSSOVER - Bridging Communities for Next Generation Policy-Making - is a “Coordination and Support Action” supported by the European Commission under the 7th Framework Programme

EC funding: €485,000

ERCIM's role:
ERCIM EEIG project partner

ERCIM members involved:
W3C (ERCIM EEIG)

Coordinator:
Marylene Garnier, Athens Technology Center SA

Duration:
October 2011 to March 2013

<http://www.crossover-project.eu>



D-CENT

D-CENT creates digital tools for direct democracy and economic empowerment. It helps communities to share data, collaborate and organize their operations. We are creating a social networking platform for large-scale collaboration. We call for citizens, developers, hackers and open source activists around Europe to work with us.

The abbreviation D-CENT refers to Decentralised Citizens Engagement Technologies. Besides the platform, the project explores how communities might manage common goods and facilitate online exchange with Bitcoin-style digital social currencies. The project started in October 2013 and will run until May 2016. We have a multidisciplinary partnership from seven countries.

The D-CENT platform is built together with citizens. Pilots running in Finland, Iceland and Spain gather use cases and knowledge from people who have already used online tools for direct democracy on an ad hoc basis. Direct Democracy/Political Empowerment – enabling more direct engagement in democratic decision making. D-CENT builds on Europe's largest experiments in direct democracy, showing how millions of citizens can become engaged in deliberation, and decision-making:

- Spain: 15M citizen movement, one of Europe's most dynamic social movements
- Iceland: Citizen Foundation, Better Reykjavik, and Better Iceland Participation democracy websites
- Finland: Open ministry Crowdsourced lawmaking site linked to Parliament

The second cluster of pilots will connect these new approaches to empowerment to economic platforms, to extend, scale and link up community digital social currencies, and creating the building blocks for an economy that links exchange to trust, deliberation and collective awareness.

Open, scalable, modular technology

D-CENT will be an open, modular and decentralized platform to build privacy-aware applications. The code-base will be described by open specifications and released under an open source license. Developers will be able to easily write API-based apps plus add new modules. The modular platform enables to share in real-time open data, democratic decision making tools, and digital social currency for the social good. The D-CENT platforms will go beyond data aggregation to enable deliberation and collective judgment, informed by feedback.

D-CENT - Decentralised Citizens
ENgagement Technologies

EC funding: € 1.905,000

ERCIM's role:
ERCIM EEIG project partner

ERCIM members involved:
W3C (ERCIM EEIG)

Coordinator: Nesta, UK

Duration:
October 2013 to June 2016

<http://dcentproject.eu/>

eAccess+



Much expertise, many guidelines and tools exist on e-accessibility but they are of a highly fragmented nature. As announced in the Communication of December 2008 on eAccessibility, the Thematic Network eAccess+ is creating a platform for collecting and providing guidance on how to use in practice this body of knowledge. eAccess+ is also a best-practice network to facilitate co-operation between the community of practitioners (found in research institutions and consultancies) and all the other stakeholders (policy makers, administrators in the public sector, technical staff in the private sector...).

The purpose is to accelerate the take-up of e-accessibility specifications and technical solutions, and to contribute to a common approach at European level.

The network will support the development of common guidelines and standards, and, where needed, will provide rationale for harmonised political and legal measures.

eAccess+ addresses the following areas:

- web accessibility, as a main focus, in order to ensure accessibility of public web sites in the Member States, in particular through the migration from national web accessibility guidelines and methodologies to the new W3C/WCAG2.0 guidelines,
- accessible convergent communications and in particular accessibility of interactive digital television,
- self-service terminals, in particular in the banking/financial sector, in public transports, in tourism/cultural heritage, and in e-government.

Work is organised in four methodological steps: consultation (introduction, information, advice, feedback), analysis (problems, ideas, incentives, proposals), support (examples, best practice, guidelines), and dissemination. Those four steps will be implemented in three waves, work will start with a first group of already more advanced Member States and then will extend to include more Member States, while expanding activities in the first group.

eAccess+ - the eAccessibility Network is supported by the European Commission under the Information and Communication Technologies Policy Support Programme

EC funding: € 740,000

ERCIM's role:
ERCIM EEIG project partner

ERCIM members involved:
W3C (ERCIM EEIG), CNR, Fraunhofer FIT

Coordinator:
Klaus Miesenberger, Linz Univ., Austria

Duration:
September 2010 to August 2013

<http://www.eaccessplus.eu/>



Global ITV

Global ITV is an EU-Brazil Research and Development Cooperation with the goal to develop an interoperability scheme that allows several iTV and Smart TV systems to work together, exchanging and using the information. The ultimate aim is to lay the foundation for a global interoperable platform.

GLOBAL ITV seeks to harmonise different existing solutions in the domains of interactive, hybrid, connected and web TV on a worldwide level. Key stakeholders from Brazil and Europe have joint forces to define a migration path and a coexistence scenario towards a next-generation hybrid TV platform based on established and open standards in alignment with the developments in the "Web World". The extensive experience gathered in the past years will be exchanged mutually between the involved partners and their advisors in order to define a viable solution with direct traction on the market and a clear perspective for the future.

The scope of the GLOBAL ITV project is to develop a schema for next generation Hybrid Broadcast-Broadband Systems to define interoperable scenarios and develop reference architectures. Attractive new advanced services and applications will be showcased. The ultimate aim is to create the foundation for a global interoperable platform.

The European partners are: IRT – Institut für Rundfunktechnik GmbH (Germany), Aqua Consult Ingenieros SL (Spain), VESTEL (Turkey), Fraunhofer-FOKUS (Germany), TDF (France), Redevisión SA (Spain), Symelar Innovación (Spain), European Broadcasting Union (Switzerland), and ERCIM/W3C

The Brazilian partners include: Universidade de São Paulo, Universidade Católica de Brasília, Universidade Federal do Pará, Universidade Estadual Paulista "Júlio de Mesquita Filho", Associação do Laboratório de Sistemas Integráveis Tecnológico, Universidade Estadual de Campinas, Universidade Federal do ABC, BAND TV, HXD Interactive Television.

Global ITV - Interoperability of Interactive and Hybrid TV systems – A new advanced scheme for future services and applications in a global environment

EC funding: € 1.399,998

ERCIM's role:

ERCIM EEIG project partner

ERCIM members involved:

W3C (ERCIM EEIG), Fraunhofer-FOKUS

Duration:

December 2013 to November 2015

<http://www.globalitv.eu/>

HTML5Apps

In contrast to native applications or “apps”, HTML5-based “apps” are platform and device agnostic, meaning that it becomes easy to move apps between devices. However, today, HTML5 lacks important functionalities such as rich APIs to interact with devices and payment support.

The goal of the HTML5Apps project is to close the gap between native and HTML5 apps through the standardisation of missing HTML5 functionalities:

- Standardize OS level APIs for HTML5 apps
- Launch new standardization efforts to close gaps between native apps and HTML5 apps
- Increase European Software Standardization efforts in Software engineering, services and cloud computing

By enabling non-proprietary, standards-based development of apps using HTML5, the HTML5Apps project will liberate developers from the constraints of native app stores and make it easier for consumers to run an app on any device they would like. The HTML5Apps project will develop HTML5 into full-fledged app development environment, creating an alternative to today’s app stores. This will liberate researchers and developers from the limiting rules of proprietary app stores. With HTML5, app developers are not tied to a particular app store, they can chose any app store that supports HTML5 apps, or even distribute the app without going through an app store by just making it available on the Web. HTML5 apps will also be able to avoid revenue sharing with today’s native app stores.

By helping to leverage all these advantages of HTML5 apps for a wider set of apps than today, the HTML5Apps will increase the ability to design and deliver innovative services for SMEs and individual researchers/developers.



HTML5Apps - HTML5 for Apps: Closing the Gaps

EC funding: € 740,000

ERCIM's role:
ERCIM EEIG project coordinator

ERCIM members involved:
W3C (ERCIM EEIG)

Coordinator:
Philipp Hoschka, W3C

Duration:
October 2013 to September 2015

<http://html5apps-project.eu/>



i-Marine

iMarine is an open and collaborative initiative that will establish a data infrastructure to support the Ecosystem Approach to fisheries management and conservation of marine living resources. iMarine empowers practitioners and policy makers from multiple scientific fields such as fisheries, biodiversity and ocean observation. The iMarine infrastructure will ensure that otherwise dispersed and heterogeneous data is available to all stakeholder communities through a shared virtual environment that brings together multidisciplinary data sources, supports cross-cutting scientific analysis, and assists communication. The aim of iMarine is to contribute to sustainable environmental management with invaluable direct or indirect benefits to the future of our planet, from climate change mitigation and marine biodiversity loss containment to poverty alleviation and disaster risk reduction.

iMarine's origins are in the D4Science project, which developed capacities for data interoperability among different research infrastructures. The project delivered an open-source technology capable of operating data e-Infrastructures in a federated virtual environment. The next obstacle was to share data among different partners, and this is the engine behind iMarine.

iMarine Services

A range of products and services have already been implemented and are used by practitioners from a variety of user communities. These gCube-based (<http://www2.gcube-system.org/>) applications provide specialized functionalities for managing, processing, and visualizing scientific data and textual content:

- AquaMaps - Creating global distribution maps for marine species which display changes in marine biodiversity caused by global climate change, using biogeography modelling.
- Integrated Capture Information System (ICIS) - Integrating regional and global capture and distribution information of aquatic species to improve the quality of global catch statistics
- The Vessel Transmitted Information Tool (VTI) - Delivering geospatial products that combine information on vessel activity and environmental conditions for scientists working in the fields of marine biology, ecology and environmental sciences.

As the iMarine infrastructure develops, further services will be deployed.

iMarine - Data e-Infrastructure Initiative for Fisheries Management and Conservation of Marine Living Resources is supported by the European Commission under the 7th Framework Programme

EC funding: €5.000,000

ERCIM's role:

ERCIM EEIG project coordinator

ERCIM members involved:

CNR, FORTH

Scientific coordination:

Donatella Castelli, CNR

Administrative coordination:

Philippe Rohou, ERCIM Office

Duration:

November 2011-September 2014

<http://www.i-marine.eu>

LIDER

The project's mission is to provide the basis for the creation of a Linguistic Linked Data cloud that can support content analytics tasks of unstructured multilingual cross-media content. By achieving this goal, LIDER will impact on the ease and efficiency with which Linguistic Linked Data will be exploited in content analytics processes.

The project aims at providing an ecosystem for the establishment of a new Linked Open Data (LOD) based ecosystem of free, interlinked, and semantically interoperable language resources (corpora, dictionaries, lexical and syntactic metadata, etc.) and media resources (image, video, etc. metadata) that will allow for free and open exploitation of such resources in multilingual, cross-media content analytics across the EU and beyond, with specific use cases in industries related to social media, financial services, localization, and other multimedia content providers and consumers. In some cases, we will explore new business model and hybrid licensing schemes for using of Linguistic Linked Data in commercial settings for Free but not Open resources.

LIDER will build upon such existing standards, reference architectures, technologies, and data in order to build the grounds for the use of Linguistic Linked Data for content analytics tasks. Current language resource infrastructures (ELRA, META-SHARE, Monnet, BabelNet) will have a special role and relevance in the project, thus ensuring the adoption of the project outcomes by these infrastructures.

The Expected result is the creation of:

- A strong community around the topic of LOD-based multimedia and multilingual content analytics
- A set of guidelines and best practices for building and exploiting LOD-based resources in multimedia and multilingual content analytics and for developing NLP services on top of Linguistic Linked Data
- A reference architecture for Linguistic Linked Data built on top of existing and future platforms and freely available resources
- A long-term roadmap for the use of Linked Data for multilingual and multimedia content analytics in enterprises.



LIDER - Linked Data as an enabler of cross-media and multilingual content analytics for enterprises across Europe

EC Funding: € 1.482,000

ERCIM's role:
ERCIM EEIG project partner

ERCIM members involved:
UPM (SpaRCIM), W3C (ERCIM EEIG)

Scientific coordination:
Asunción Gómez-Pérez, UPM, Spain

Duration:
October 2012 - September 2016

<http://www.lider-project.eu/>

MediaScape

In times where TVs, smartphones and tablets are all being connected to the Internet, it is increasingly common for people to watch TV at the same time as interacting with their smartphone or tablet. MediaScape is working on helping broadcasters to provide a socially engaging experience across multiple screens for broadcast and streamed content, and associated applications in order to provide the users more consistent multi-device and multi-user media services. This will build upon the success of HTML5 and the marriage of the TV, PC and Mobile worlds.

MediaScape takes connected service development to a new level and lays the foundations for advanced connected multi-user services via a standardised approach integrated into the HTML5 paradigm. In this approach, the three main involved actors take advantage of Mediascape: a) the users, b) the broadcasters and c) developers and service providers.

Benefits of MediaScape for the users

The users will be able move parts of the functionality smoothly from one device to another in an intuitive manner and the application would adapt itself to the device. A user will also be able to handle with different devices being used simultaneously, interacting with a services seamlessly split to the context. The users will be able to manage personal devices together with shared devices (such as TV or an in-car dashboard device) for synchronised experience sharing in multi-user scenarios.

Benefits of MediaScape for the broadcasters

For the broadcasters, MediaScape facilitates the marriage of the TV, PC and Mobile worlds through a standard solution that includes real-time delivery and synchronisation of media contents and applications across a variety of devices, eliminating them the need for the creation and maintenance of totally different developments to provide this kind of services. With MediaScape, broadcasters will be in charge of creating and providing a single application that reaches all target environments.

Benefits of MediaScape for developers and service providers

From a developer and service provider point of view, aspects of resource discovery and association, synchronisation and adaptation can be partially implemented with different tools (JavaScript libraries, APIs, etc.). However these implementations are non-standard, non-interoperable, and non-transparent for the user and do not work within TV type devices which currently rely on proprietary and vendor specific technologies. MediaScape opens up these features to a new developer community - the large and creative group of developers working on the Web, and particularly the growing group working with HTML5 for video, audio and real-time web applications. MediaScape makes it as easy to create these kinds of services as it is to create an HTML web page, treating the TV set as just one part of the ecosystem and including the broadcast simply as a new type of resource - thereby enabling much broader participation in their creation, and increasing the range and diversity of potential applications.



MediaScape - Dynamic Media Service
Creation, Adaptation and Publishing on
Every Device

EC funding: €3.110,993

ERCIM's role:

ERCIM EEIG project partner

ERCIM members involved:

W3C (ERCIM EEIG)

Scientific coordination:

Igor G. Olaizola, Vicomtech

Duration:

September 2013 - March 2016

<http://www.i-marine.eu>

PaaSage



ERCIM launched PaaSage in October 2012. PaaSage is a major research initiative with the goal of developing an open and integrated platform to support model based lifecycle management of Cloud applications.

Cloud solutions are currently still insufficient and require a high level of expertise on the part of the developer and the provider to properly exploit the capabilities offered by Cloud technologies. Cloud infrastructures are not standardized and porting an existing application to a Cloud platform is still a very challenging task, leading to a strong interdependence between the client application and the Cloud platform. Developing once and deploying on many Clouds is not a viable proposition as things stand. This is the challenge that the PaaSage consortium will address. PaaSage will deliver an open and integrated platform to support both design and deployment of Cloud applications, together with an accompanying methodology that allows model-based development, configuration, optimisation, and deployment of existing and new applications independently of the existing underlying Cloud infrastructures.

“PaaSage will provide the relevant means to significantly improve programmability, usability and performance of Clouds beyond current state of the art approaches”, says Keith G. Jeffery, scientific coordinator of the project. “We have to admit that European industry is lagging behind in business creation and development on the basis of Cloud computing technologies”, adds Pierre Guisset, project coordinator, “Our objective with PaaSage is to develop the tools that will enable European small and large businesses to take a leading position in exploiting Clouds. Typically a business will be developing its in-house server cluster to an in-house Cloud to obtain benefits of elasticity and eco-friendliness. However, when elasticity needs to extend beyond the in-house environment to a public cloud there are interoperability problems and provider proprietary solution constraints. These will be overcome by PaaSage”.

PaaSage is a collaborative research project co-funded under the ICT theme of the 7th framework programme of the European Union. In particular, PaaSage addresses the findings highlighted by the Commission’s Cloud Computing Expert Working Group.

PaaSage - Model-based Cloud Platform
Upperware

EC Funding: € 7.100,000

ERCIM's role:
ERCIM EEIG project coordinator

ERCIM members involved:
STFC, Inria, FORTH, University of Cyprus

Scientific coordination:
Keith Jeffery (ERCIM)

Administrative coordination:
Philippe Rohou (ERCIM)

Duration:
October 2012 - September 2016

<http://www.paasage.eu>



SERENOA

Serenoa was aimed at developing a novel, open platform for enabling the creation of context-sensitive service front-ends (SFEs). A context-sensitive SFE provides a user interface (UI) that exhibits some capability to be aware of the context and to react to changes of this context in a continuous way.

While most of the existing applications still target at a pre-defined context of use, of an able-bodied user, with a Desktop PC interacting in a stable environment, currently, the end users interact with different devices, using multiple modalities and from varied situations (e.g. while cycling, driving, shopping). Although the contexts significantly vary, stakeholders, including developers and designers, are not able to find support that is complete enough to aid the generation of applications that are suitable for end users to interact in their environments. As a result the development process is delayed and complex, and the applications launched often target at a specific context of use. Serenoa aims at extending the state-of-the-art of adaptation, by providing support for stakeholders to develop applications that can successfully adapt their front-ends according to the characteristics and constraints posed by multiple contexts.

Achievements

To provide support for adaptation, Serenoa achievements encompass a series of tools and methods, including: reference models, languages, authoring environments, prototypes, evaluation criteria, frameworks and toolkits. With such tools and methods, Serenoa provides an innovative platform to support the development of applications that consider adaptation. By using the outcomes provided by the project, stakeholders (as developers and designers) can find guidance to better define, develop, implement, evaluate, and maintain their applications, facilitating and accelerating the development of the UI adaptations.

Applications

Multiple application domains can benefit from adaptation and from Serenoa outcomes, including applications targeting at: mobile terminals, smart phones, tablet PC's, and web. The contexts considered also vary, for instance concerning users with different profiles, preferences and impairments, devices with different modalities, dimensions and capabilities, and environments with different locations, noise and light levels. For example: the user interface can be adapted in a warehouse picking scenario, in which the end user interact with a head mounted display and auditory modality; or in a medical scenario, in which an avatar can be used to mediate the end user interaction, using a simplified language to improve the accessibility of the system.

Some of the source code of the applications generated are publicly available, and can be retrieved from a repository hosted at google code. Moreover, all the deliverables have been published in the website, most of them are available for public access.

SERENOA - "Multidimensional context-aware adaptation of Service Front-ends" is a Specific Targeted Research Project supported by the European Commission under the 7th Framework Programme

EC funding: €999,000

ERCIM's role:

ERCIM EEIG project partner

ERCIM members involved:

CNR, Université Catholique de Louvain (FNRS/FWO), W3C (ERCIM EEIG)

Coordinator:

José Manuel Cantera Fonseca,
Telefónica I+D, Spain

Duration:

September 2010-August 2013

<http://www.serenoa-fp7.eu/>

Smart Open Data

SmartOpenData will create a Linked Open Data infrastructure (including software tools and data) fed by public and freely available data resources, existing sources for biodiversity and environment protection and research in rural and European protected areas and its National Parks.

This will provide opportunities for SMEs to generate new innovative products and services that can lead to new businesses in the environmental, regional decision-making and policy areas among others. The value of the data will be greatly enhanced by making it available through a common query language that gives access to related datasets available in the linked open data cloud.

The commonality of data structure and query language will overcome the monolingual nature of typical datasets, making them available in multiple languages.

Vision and goal

The vision of the SmartOpenData project is that environmental and geospatial data concerning rural and protected areas can be more readily available and re-usable, better linked with data without direct geospatial reference so different distributed data sources could be easily combined together. SmartOpenData will use the power of Linked Open Data to foster innovation within the rural economy and increase efficiency in the management of the countryside. The project will prove this in a variety of pilot programmes in different parts of Europe.

SmartOpenData goal is making INSPIRE/GMES/GEOSS infrastructure better available for citizens, but also mainly for SME developers. On one hand, Europe and EU invest hundreds of millions of Euros in building the INSPIRE infrastructure. On the other hand, most of European SMEs and citizens use for their applications Google maps. National and regional SDIs offer information which is not available on Google, but this potential is not used. One of the main goals of SmartOpenData is making European Spatial Data easily re-usable not only by GIS experts but also by SMEs.

In order to support Open Data Strategy for Europe and increase re-use of open public data from the European Commission, SmartOpenData will use where possible data and services from EC Open Data Portal2. In addition, any application built on this data source will be registered on this portal3. Same initiative is ongoing on national level, where SmartOpenData participants will try to disseminate the project outcomes in the same way..



Smart Open Data - Linked Open Data for environment protection in Smart Regions

EC Funding: € 2.355,400

ERCIM's role:
ERCIM EEIG project partner

ERCIM members involved:
W3C (ERCIM EEIG), UPM (SpaRCIM),

Project coordinator:
Jesús María Estrada Villegas, Empresa de Transformación Agraria S.A, Spain

Duration:
November 2013 - 31 October 2015

<http://www.smartopendata.eu/>



STREWS

The Web platform is a hotbed of innovation that will affect deployment of technologies and applications for the next decade, and will influence the security and privacy that European users and service providers can achieve. The STREWS project will link European security and trust related research and development with ongoing standards and development work for the Web in IETF and W3C.

The technical scope of the STREWS project is represented by the case studies which identify the key challenges in the future web ecosystem. This is done by (1) assessing the security of the current state-of-practice in a broad setting, and by (2) analysing and improving the security aspects of two highly-promising technological evolutions in the course of the project as part of the case studies. The broad security assessment bundles the recently emerging and upcoming Web features into a single model, and will identify the security weaknesses in current technologies, and drive the short-to-midterm web security roadmap. The two case studies will be analysed sequentially. The first case study, assessing and improving the security aspects in real-time web (WebRTC), will start at the beginning of the project, and yield first results halfway the project. The second case study will run in the second half of the project

The project is also aimed at building a community consensus around the STREWS goals with dissemination both via traditional publication mechanisms but also using dedicated workshops for interaction with W3C and IETF participants, and through sessions in relevant conferences. STREWS' dedicated workshops will be themed around the case studies but will also address and report upon the more generic security platform work done. This task will handle workshop planning, logistics and reporting for both STREWS workshops and co-organised sessions at other events. STREWS will aim to co-locate workshops with relevant conferences.

Another aspect of STREWS is to define a near to mid-term research roadmap for Web security to guide impactful research and development of secure and trustworthy Web technologies. The roadmap will collect areas of Web security which are still underdeveloped, identify missing pieces in the identified research landscape, and point out promising directions for future research. In addition connections between research and standardisation activities will be identified, as well as existing mismatches in the area shown. This way, the roadmap will provide a bigger picture of the field of Web security research, which will aid the decision making process, when it comes to create new research/standardisation actives and future research projects/work programs.

STREWS - Strategic Research Roadmap for European Web Security

EC funding: € 790,000

ERCIM's role:
project coordinator

ERCIM members involved:
ERCIM EEIG/W3C, Katholieke Universiteit Leuven

Scientific coordination:
Rigo Wenning, ERCIM/W3C

Administrative coordination:
Linh Nguyen, ERCIM Office

Duration:
October 2012 - September 2015

<http://www.strews.eu/>

VOICES

There is a widespread agreement that ICT services, especially mobile ones, have the potential to play a major role in furthering social and rural development in developing economies. Market penetration and rural community adoption of basic mobile telephony and services have been extremely rapid in recent years. This is opening up lots of new opportunities, but in order to realize the full potential of mobile ICT services, important challenges and obstacles must be overcome. This is what the VOICES project set out to do.

The Mobile Web for Social Development Roadmap, published as a result of the EU-FP7 Digital World Forum project, made it clear that realizing the full potential of mobile ICT and Web services requires addressing two big types of challenges:

- The leveraging of content that is locally relevant to actors and entrepreneurs who are of key importance to on-the-ground social and rural development.
- The removal of a range of access barriers (notably, limitations related to access channels, literacy, and languages) that currently hamper information/knowledge sharing and associated community building especially in rural areas.

The VOICES objectives delivered the following results and advances and showed their value particularly in the African context:

Open and wider access: VOICES improved voice-based access to content and mobile ICT services by building a toolbox for the development of innovative voice services. VOICES worked towards integration of local community radio and ICTs. The project delivered speech technologies: tool support and methodology for under-researched and under-resourced African languages.

Long-term sustainability: A sustainable architecture and business models ensures local adoption and exploitation of the tools and methods beyond the end of the project. VOICES enhanced uptake by delivering a mobile training lab that offers capacity building for local partners.

The final conference of the VOICES project was held on 20 June 2013 in Dakar, Senegal. Representatives from the health sector as well as ICT-entrepreneurs from Dakar were present during this event. The results of the m-health pilot in Senegal were presented as examples of voice-based services that can benefit health workers and other stakeholders. The Open Source voice-platform Emerginov was presented as the central tool for development of voice-services for global development.



VOICES - “Voice-based Community-centric mobile services for social development” is a “Specific International Cooperation Action” supported by the European Commission under the 7th Framework Programme

EC funding: €2.046.000

ERCIM's role:
project coordinator

ERCIM members involved:
ERCIM EEIG/W3C

Scientific coordination:
Stéphane Boyera, Web Foundation

Duration:
January 2011-June 2013

<http://www.mvoices.eu/>



WAI-ACT

WAI-ACT, a Cooperation Framework for Guidance on Advanced Technologies, Evaluation Methodologies, and Research Agenda Setting to Support eAccessibility, addresses critical areas of advanced accessibility support through activities that build upon the strengths of past web accessibility work, harmonizes existing work, and helps shape a research agenda in coordination with key stakeholders in Europe and internationally.

The project addresses the need for expanded European and international cooperation on the development of accessibility solutions for people with disabilities; for consensus-based, authoritative technical guidance to accelerate implementation of advanced technologies; for internationally harmonised evaluation methodologies; and for a coordinated research agenda on eAccessibility.

WAI-ACT addresses these challenges through development of a framework for open, expanded cooperation among European and international stakeholders, technical guidance on advanced web technologies; an evaluation methodology for web accessibility; and a research agenda for eAccessibility. Technical guidance will include a repository of information on accessibility support in web technologies, application notes on authoring accessible web page components, and code samples for web applications.

WAI-ACT will result in:

- Expanded cooperation on the development of accessibility solutions
- Authoritative accessibility guidance on advanced web technologies
- Harmonized methodologies for evaluating accessibility of websites
- Common visions for a coordinated eAccessibility research agenda.

WAI-ACT builds upon the strengths of the W3C Web Accessibility Initiative (WAI) cooperation mechanisms to facilitate strategic European and international participation throughout the project. WAI-ACT also has active exchange with relevant networks in Europe such as eAccess+, and coordinate standardisation activities.

WAI-ACT - Web Accessibility Initiative: Ageing Education and Harmonisation, a Coordination and Support Action supported by the European Commission under the 7th Framework Programme

EC funding: € 999,000

ERCIM's role:
project coordinator

ERCIM members involved:
ERCIM EEIG/W3C, Fraunhofer Institute for Applied Information Technology FIT

Scientific coordination:
Shadi Abou-Zahra, W3C

Duration:
September 2011 to August 2014

<http://www.w3.org/WAI/ACT/>

WEBINOS

The Webinos project defined and delivered an Open Source Platform and specific components for the Future Internet, which will enable web applications and services to be used and shared consistently and securely over a broad spectrum of converged and connected devices, including mobile, PC, home media (TV) and in-car units. Promoting a "single service for every device" vision, Webinos moved the existing baseline from installed applications to services, running consistently across a wide range of connected devices, ensuring that the technologies for describing, negotiating, securing, utilizing device functionalities and adapting to context are fit for purpose. Innovations in contextual description will be broad covering but not limited to device capabilities, network access, user identity and preferences, location, behaviourally induced properties and finally the more complex issue of the users' social network context.

Webinos addressed security and privacy issues as part of Quality of Service that users of web services expect. The addressed challenges comprised how to provision and adapt security across a range of devices, services, networks as well as how individuals can gain control over the privacy aspects of their web presence regardless of the service that is being used. Context and privacy are intimately intertwined: rich context is valuable but without user controlled privacy it becomes a liability.

Webinos will boost the industry migration towards web-based services. Webinos can back this by providing inter-operable, standardised, open source technology utilizable across domains with direct commercially exploitable value. Webinos will also act as an industry catalyst to encourage collaboration and discourage fragmentation in this space.

There are strong industry moves towards Internet friendly and Internet integrated offerings, and there exists a window of opportunity to place this WebOS technology on a robust open foundation that will remove economic barriers to engagement, embody policy on data privacy in concrete technology (protecting consumers and enterprise) and create a centre of web centric expertise (benefiting technical competitiveness).

The Webinos project achieved a major milestone with the launch of the webinos Open Source foundation in November 2013. .

A white paper about the Webinos can be downloaded at <http://webinos.org/files/2014/06/webinos-foundation-whitepaper.pdf>



WEBINOS - Secure WebOS Application Delivery Environment is a "Collaborative Project" supported by the European Commission under the 7th Framework Programme

EC funding: €9.780,000

ERCIM's role:
project partner

ERCIM members involved:
Fraunhofer FOKUS, W3C/ERCIM

Coordinator:
Stephan Steglich, Fraunhofer-Gesellschaft

Duration:
September 2010-August 2013

<http://webinos.org/>

Human Capital (HC) is a central concern within all organizations. In ERCIM its main focus is the European cooperation of different entities with their own HC policies. To this end we are currently building on two key activities. The first is the ERCIM post-doc fellowship programme that has been in existence for a long time and has been reinforced and further stimulated by the support of the European project “ABCDE”. This programme facilitates the participation of young scientists in research teams within ERCIM member institutes by organizing postdoctoral fellowships. In addition to mobility in high quality teams, it helps participants further their understanding of the European research environment and carrier capabilities. The second activity is the Cor Baayen Award that acknowledges the achievements of young research scientists from European teams in informatics or mathematics.

There is scope for further development of both of these tools, but we would also like to create new schemes for mobility between ERCIM members. In particular, in addition to post-docs, we would like to foster mobility of all scientists, including phd students, engineers and management and administration professionals.

ERCIM’s Human Capital Task Group is in charge of supervising these actions and proposing new directions. In 2013 it was composed of:

- Tore R. Jørgensen, NTNU
- Claude Kirchner, Inria (chair)
- Adriana Lazzaroni, CNR
- Emma Lière, ERCIM Office
- Laszlo Monostori, SZTAKI
- Leszek Pacholski, PLERCIM
- Julius Stuller, CRCIM
- Pierre Wolper, FNRS/FWO
- Edgar Weippl, AARIT

*Claude Kirchner, Inria, chair of the
ERCIM Human Capital Task Group*





Fellowship Programme co-funded by the European Commission



The “ERCIM Alain Bensoussan Fellowship Programme” was supported by the FP7 Marie Curie Actions - People, Co-funding of Regional, National and International Programmes (COFUND) of the European Commission. More than 160 fellowships were granted under the Programme.

The last co-funded Call for applications took place in April 2013.

The Marie Curie co-funding action aimed to increase the transnational mobility for training and career development of experienced researchers. The co-funding resulted in a considerable increase in the number of ERCIM fellows. The duration of the fellowships was extended and the fellows could benefit from one or two periods of twelve months spent in one or two ERCIM member institutes. Additionally, employment conditions became more flexible, with the option of signing a working contract instead of a stipend agreement in some of our institutions.

The fellows had the opportunity to participate in a yearly “ABCDE seminar” offering specific training on a range of non-scientific skills. Seminars were held in Berlin in November 2011, in Sophia Antipolis, France, in October 2012 and in Athens in October 2013. A fourth and last seminar will be organised in 2014.

“Alain Bensoussan” Fellowship Programme

The PhD Fellowship Programme has been established as one of the premier activities of ERCIM. Since its inception in 1991, over 400 fellows have passed through the programme. In 2013, 53 young scientists commenced an ERCIM PhD Fellowship and 103 fellows have been hosted during the year. This represents 681 person-months.

The ERCIM Fellowship Programme is open to young researchers from all over the world. It focuses on a broad range of fields in Computer Science and Applied Mathematics.

The fellowship scheme also helps young scientists to improve their knowledge of European research structures and networks and to gain more insight into the working conditions of leading European research institutions. In 2013, many of the hosted fellows were native of countries outside the European Union. This reflects ERCIM’s contribution to make Europe not only the world’s biggest ‘brain factory’ but also a large ‘brain magnet’ in the field of informatics and applied mathematics.

The fellowships are of 12 months duration, spent in one of the ERCIM member institute. Fellows can apply for second year in a different institute.

Conditions

Candidates must:

- have obtained a PhD degree during the last eight years (prior to the application deadline) or be in the last year of the thesis work with an outstanding academic record
- be fluent in English
- have no obligations with respect to military service which could impact on the fellowship
- have completed their PhD before starting the grant.

The fellows are appointed either by a stipend (an agreement for a research training programme) or a working contract. The type of contract and the monthly allowance/salary depends on the hosting institute.

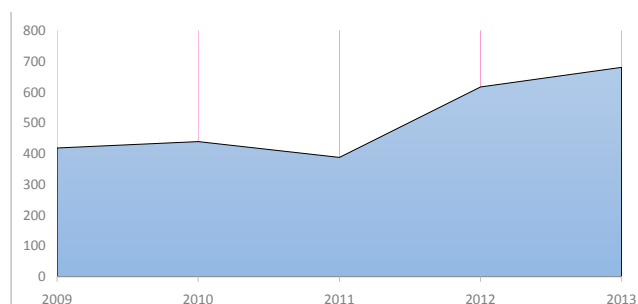
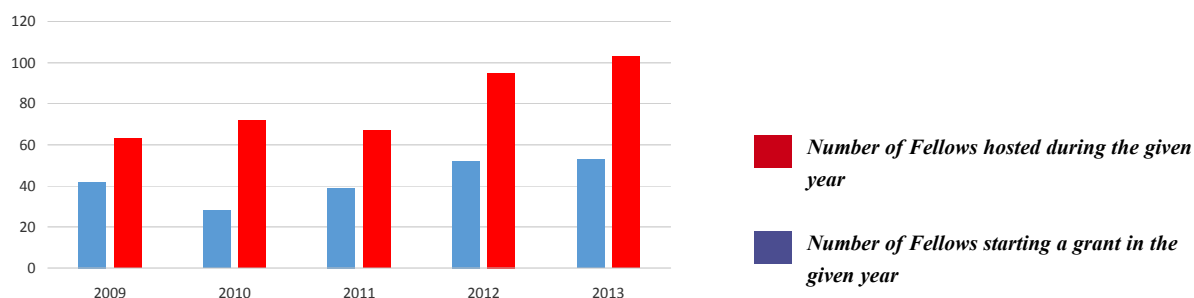
Deadlines for applications are currently 30 April and 30 September each year.

Since 2005 the Fellowship Programme has been named in honour of Alain Bensoussan, former president of Inria, one of the three ERCIM founding institutes.

<http://www.ercim.eu/activity/fellows>

ERCIM Fellows hosted in 2013

- Dhaminda Abeywickrama at Fraunhofer-Gesellschaft
- Avinash Achar at NTNU
- Dirk Ahlers at NTNU
- Riccardo Albertoni at SpaRCIM
- Ekaterina Alekseeva at Inria
- Ishtiaq Ali at University of Warsaw
- George Almpandis at NTNU
- Natalia Amelina at NTNU
- Doreid Ammar at VTT
- Giorgi Baghaturia at University of Warsaw
- Igor Bakovic at University of Warsaw
- Demis Ballis at SpaRCIM
- Luisalberto Barróncedo at SpaRCIM
- Alejandro Bellogin at CWI
- Fehmi BenAbdesslem at SICS
- Federico Benvenuto at Inria
- Muhammadkhurram Bhatti at SICSSwedishICTAB
- Andrii Bondarenko at NTNU
- Majid Butt at FNR
- Tuan-vu Cao at NTNU
- Luca Chiaraviglio at Inria
- Delia Ciullo at Inria
- Fabio Corrente at SpaRCIM
- Amitava Das at NTNU
- Oleg Davidyuk at Inria
- Katrien DeMoor at NTNU
- Maurizio DePittà at Inria
- Ines Diloreto at NTNU
- Lei Dong at NTNU
- Jingjing Du at NTNU
- Semya Elaoud at Inria
- Pantelis Frangoudis at Inria
- Meritxell Genescàfrancitorra at NTNU
- Michail Giannakos at NTNU
- Joana Gonçalves at CWI
- Dan Groisevjeny at Fraunhofer-Gesellschaft
- Antti Haimi at NTNU
- Sean Halle at CWI
- Ralf Hannemann-tamas at SZTAKlandNTNU
- Dac-Tu Ho at NTNU
- Audrius Jurgelionis at VTT
- Bridget Kane at NTNU
- Anargyros Katsampekis at CWI
- Chamath Keppitiyagama at SICS
- Malik Muhammad Zaki Murtaza Khan at NTNU
- Rie Komuro at NTNU
- Dalia Kriksciuniene at CRCIM (MUNI)
- Pawan Kumar at Fraunhofer-Gesellschaft
- Antti Kuusisto at University of Wroclaw
- Lucian Leahu at SICS
- Dominik Luecke at CWI
- Alexander Lundervold at Inria
- Cai Luo at VTT
- Iza Marfisi at SICS
- Marie-eleonore Marmion at FNRS/FWO (Université Libre de Bruxelles)
- Henar Martínrodríguez at VTT
- Sararegina Martinroman at NTNU
- Donald McMillan at SICS
- Liam McNamara at SICS
- David Mera at CRCIM (MUNI)
- Matteo Mio at Inria and CWI
- Mustafa Misir at Inria
- Prasantkumar Misra at SICS
- Jean-marc Montanier at NTNU
- Yassine Mrabet at FNR (CRP Henri Tudor)
- Gergely Neu at Inria
- Maddalena Nurchis at VTT
- Mesrob Ohannessian at Inria
- Matthew Orlinski at Fraunhofer-Gesellschaft
- Luis Ortiz-Gracia at CWI
- Isil Öz at SICS
- Partha Pakray at NTNU
- Lin Pan at FNR (University of Luxembourg)
- Efi Papatheocharous at SICS
- Martin Parisot at University of Warsaw
- BidyutKumar Patra at VTT
- Murray Patterson at Inria and CWI
- Tatiana Polushina at NTNU
- Zehui Qu at NTNU
- Erik Quaeghebeur at CWI
- Fabien Racape at Fraunhofer-Gesellschaft
- Nicola Rebagliati at VTT
- Zahid Riaz at Fraunhofer-Gesellschaft
- Roberto Rigolin Ferreira Lopes at NTNU
- Alan Said at CWI
- Pierluigi SalvoRossi at NTNU
- Eduard Santamaria at Fraunhofer-Gesellschaft
- Francesco Santini at Inria
- Jodi Schneider at Inria
- Angeliki Sgora at VTT
- Dimitrios Simos at Inria and SBA Research
- Mauricio SotoAlvarez at VTT
- Maria SuarezTaboada at CWI
- Marco Tiloca at SICS
- Mauricio ToroBermudez at UCY
- Italo Toselli at Fraunhofer-Gesellschaft
- Stefano Urbinati at University of Warsaw
- Dimitrios Vergados at NTNU
- Ting Wang at Inria
- Rengmao Wu at SpaRCIM
- Bo Yang at CRCIM
- Tomofumi Yuki at Inria
- Chongsheng Zhang at NTNU



Person/months equivalents for the fellows hosted from 2008 to 2013

Julien Mairal Receives the 2013 Cor Baayen Award



Julien Mairal from Inria has received the 2013 ERCIM Cor Baayen Award. Honorary Mentions are given to Alexander Bertrand, KU Leuven and Ben Glocker, Microsoft Research Cambridge. The Cor Baayen Award is awarded annually by ERCIM to a promising young researcher in the field of Informatics and Applied Mathematics.

Julien Mairal obtained his PhD in 2010 at Inria under the joint supervision of Francis Bach and Jean Ponce. His PhD thesis was concerned with new and efficient algorithms for sparse coding and dictionary learning with applications to image processing and computer vision.

Julien's most significant contribution is a stochastic optimization algorithm for a problem known as dictionary learning in signal processing and machine learning. Given a dataset represented by high-dimensional vectors, the task consists of approximating each data point by a linear combination of a few elements from a learned dictionary. The original dictionary learning formulation, which was introduced a decade ago by Olshausen and Field from the neuroscience community, has recently gained a large interest in signal processing and machine learning, showing promising results for numerous applications. The proposed algorithm was shown to be much more scalable and computationally efficient than existing approaches, which is of acute importance currently with the emergence of massive datasets and the need to analyze them. This work is available through an open-source software, which is now widely used.

Julien also developed state-of-the-art image restoration algorithms for image denoising and image demosaicking (reconstructing colour images from raw data from CCD sensors), by combining two successful paradigms: sparse representations of image patches, and non-local image self-similarities. His third contribution was to develop new formulations of dictionary learning for classification or regression tasks, whereas traditional applications were devoted to signal or image reconstruction. This proved particularly useful in computer vision, where it allows discriminative representations of natural image patches to be found.

Finally, Julien and his collaborators worked on solving optimization problems related to structured sparse estimation, which has received recently a lot of attention in statistics and machine learning. Structured sparse models differ from classical ones in that variables are grouped together according to an a priori structure, a hierarchy for example. Computing penalized likelihood estimators is challenging in this context, but Julien and his colleagues obtained efficient and scalable optimization techniques by drawing novel connections between network flows and sparse estimation. This allows the use of structured sparse models at a large scale, which was not previously possible.

Julien's PhD work was published in top conferences (CVPR, ECCV, ICCV, ICML, NIPS) and journals (JMLR, PAMI) of computer vision and machine learning, and was honoured by three French prizes for a best PhD thesis. It is also widely cited, with ten papers having received over 100 citations according to Google Scholar, and an amazing h-index of 19 for such a young researcher.

For more information about the ERCIM Cor Baayen Award, see <http://www.ercim.eu/activity/cor-baayen-award>

2013 Award

Each institute was allowed to select up to two finalists from its country. For the 2013 Cor Baayen Award, the ERCIM representatives have accepted 21 finalists:

Winner:

- Julien Mairal

Honorary Mentions:

- Alexander Bertrand
- Ben Glocker

Finalists

- Igor Boehm
- André Chailloux
- Marek Cygan
- Jose Luis Fernandez-Marquez
- Gerard Hoekstra
- Mustafa Misir
- Anna Monreale
- Stefanie Nowak
- Mathias Payer
- Sini Ruohomaa
- Floor Sietsma
- Pavel Vácha
- Rossano Venturini

Award Rules

The Cor Baayen Award, given to a promising young researcher in computer science and applied mathematics, was created in 1995 to honour the first ERCIM President and is open to young researchers having completed their PhD thesis in one of the "ERCIM countries". The award consists of a cheque for €5000 together with an award certificate. The successful fellow invited to the ERCIM autumn meetings.

The ERCIM Outreach Task Group is responsible for the communication between ERCIM and its wide range of stakeholders. They include national and international funding bodies, the research community in informatics and applied mathematics, with a focus on both senior scientists and young researchers, as well as industrial R&D. ERCIM considers its outreach activities as an important tool for community building. These include publications such as the ERCIM News magazine, the ERCIM web site and the support and organisation of scientific events.

The well established ERCIM News magazine (see next page), under the responsibility of the editorial board, has already successfully contributed to ERCIM's reputation in the scientific community. It is also a good example of the close cooperation between all ERCIM institutes. In addition to ERCIM News, a number of strategic reports have also been published. All this information can also be accessed via twitter and LinkedIn.

People contributing to the Outreach Task Group policy are:

Silvia Abrahao, SpaRCIM
 Erzsebeth Csuhaj-Varju, SZTAKI
 Marios Dikaiakos, UCY
 Irini Fundulaki, FORTH
 Truls Gjestland, NTNU
 Marie-Claire Fogue, W3C
 Kersti Hedmann, SICS
 Annette Kik, CWI
 Peter Kunz, ERCIM office

Carlo Meghini (CNR)
 Benoit Michel, FNRS/FWO
 Eleni Orphanoudakis, FORTH
 Carol Peters, CNR
 Martin Prime, STFC
 Andreas Rauber, AARIT (chair)
 Harry Rudin, SIRA
 Erwin Schoitsch, AARIT
 Jiri Zlatuska, CRCIM



ERCIM web site.



**Andreas Rauber, AARIT,
 chair of the ERCIM
 Outreach Task Group**

ERCIM News Editorial Board

(as of December 2013)

Central editor:

- Peter Kunz, ERCIM Office

Local editors:

- Erzsébet Csuha-Varjú, SZTAKI
- Marie-Claire Fergue, W3C
- Truls Gjestland, NTNU, Norway
- Joaquim Jorge, INESC ID / PEG, Portugal
- Michal Haindl, CRCIM, Czech Republic
- Kersti Hedman, SICS, Sweden
- Annette Kik, CWI, The Netherlands
- Michael Krapp, Fraunhofer SCAI, Germany
- Silvia Abrahão, Universidad Politécnica de Valencia / SpaRCIM, Spain
- Benoit Michel, Université catholique de Louvain, Belgium
- Eleni Orphanoudakis, ICS-FORTH, Greece
- Carol Peters, ISTI-CNR, Italy
- Thierry Priol, Inria, France
- Harry Rudin, SIRA, Switzerland
- Erwin Schoitsch, AIT Austrian Institute of Technology GmbH/AARIT, Austria
- Nguyen Hung Son, University of Warsaw, Poland
- Thomas Tamisier, Centre de recherche publique Gabriel Lippmann, Luxembourg.

ERCIM News

Since its creation, ERCIM News has evolved from ERCIM's 'in-house newsletter' into a European quarterly magazine in the domains of Information and Computer Sciences, Applied Mathematics and Communication Technologies, published in both printed and online editions.

ERCIM News mainly consists of articles written by scientists and edited according to guidelines designed to make the articles accessible to all target groups. It also includes invited articles by European policy-makers and decision-makers in relevant areas. The objective of ERCIM News is to provide regular and continually updated high-quality and authoritative information concerning European research and innovation activities in the scientific domains of interest. The information is reported in an easily accessible fashion, with references and links being provided so that the interested reader can find more in-depth information on specific topics as needed. The intended target audience is thus international and national scientific policy- and decision-makers, European and national funding agencies, the global scientific community and relevant industrial organisations, with a special focus on the European area. Through the short articles and news items, it provides a forum for the exchange of information between both member institutes and the wider scientific community.

With each issue focusing on a special theme, the ERCIM News series has become a unique collection providing an overview of different topics within information technology. In 2013 ERCIM covered the following special themes:

- Smart Energy Systems
- Mobile Computing
- Intelligent Cars
- Image Understanding

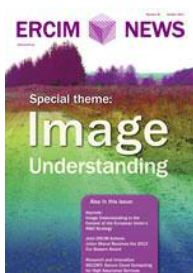
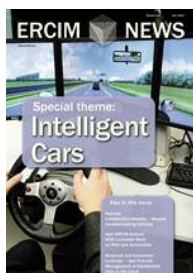
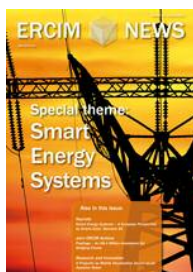
For each issue, ERCIM News invites a personality to write a keynote statement relevant to the European scientific community. Authors have included

- Ariane Sutor, Siemens AG, EIT ICT Labs
- Ilja Radusch, Fraunhofer FOKUS
- Libor Král, European Commission
- Wendy Hall, University of Southampton.

ERCIM News is the result of close cooperation between all ERCIM institutes. It is published in both printed and electronic form. The printed edition has a circulation of about 6,000 copies and is distributed in over 100 countries. The online edition offers full-text searching and the numerous sites and documents quoted can easily be accessed on the Web. ERCIM News has made a significant contribution to the wider recognition of ERCIM.

<http://ercim-news.ercim.eu/>

Issues published in 2013





The ERCIM office is located in the Inria Sophia Antipolis - Méditerranée Research Centre premises.

ERCIM has an office in Southern France, hosted by Inria and located in the Inria Sophia Antipolis - Méditerranée Research Centre premises, nestled amongst researchers (and surrounded by cicadas). The ERCIM Office manages the day-to-day business of ERCIM as well as the European branch of the World Wide Web Consortium (W3C).

With its team of experts, the ERCIM Office provides assistance to ERCIM members in managing European projects by performing the financial and administrative tasks, either as coordinator or partner. Member institutes can thus fully concentrate on scientific work, unburdened by time-consuming administrative tasks. The office has been involved with more than 70 successful projects. The projects in which the ERCIM Office was involved in 2013 are presented on pages 11-29. They also include projects with participation of the W3C. Some include both W3C and ERCIM members. They provide a nice example of how ERCIM can facilitate cooperation between research institutes and the W3C with its interest in Web standardization.

Hosting and managing the European branch of W3C is another major task of the ERCIM Office. The activities related to W3C represent about the half of ERCIM's budget. Details are given on the following pages.

The ERCIM Office is under the responsibility of the ERCIM EEIG Board of Directors but also handles ERCIM AISBL financial matters and supports the whole ERCIM community in administrative matters such as the management of the ERCIM Fellowship Programme, as well as in communications, for example by hosting and maintaining web sites and by producing ERCIM News.

ERCIM Office employees in 2013

- Caroline Baron, finance and administration manager
- Pierre Guisset, senior consultant
- Marie Kazgandjian, administrative assistant
- Peter Kunz, communications and ERCIM News central editor
- Vivien Lacourba, IT manager
- Alexandra Lavirotte, administrative assistant
- Emma Lière, project assistant and Fellowship Programme coordinator
- Jessica Michel Assoumou, project coordinator
- Linh Nguyen, project assistant
- Pascale Peyrol, administrative assistant
- Amandine Pigeon, administrative assistant
- Samuel Réthoré, systems engineer
- Philippe Rohou, project group manager
- Jean-Guilhem Rouel, systems engineer
- Tom Williamson, project coordinator

Jérôme Chailloux, ERCIM Manager and head of the ERCIM Office.





W3C is the international forum for the development of technology standards and for stewardship of the Web. The organization creates open standards for technology and best practices so that the Web connects people and serves as a platform for innovation. W3C is building an Open Web Platform to connect humanity in a way that makes access to knowledge more efficient and equitable.

The boundaries of this platform are drawn by the Members and the larger Web community. The platform includes the HTML5 specification, CSS, SVG, WebFonts (WOFF), a growing number of APIs, and many other technologies, all designed to work together on any platform, for any person, anywhere.



ERCIM and W3C

ERCIM hosts the European headquarters of the World Wide Web Consortium (W3C). ERCIM and W3C aim to strengthen research relationships throughout Europe to better support the development of Web technology and to jointly share the results of their collaboration.

Five of the European W3C Offices are based at ERCIM institutes, namely at CWI (Benelux); FORTH (Greece); SZTAKI (Hungary); CNR (Italy) and SICS (Sweden). W3C Offices in Europe work with their regional Web communities to promote W3C technology in local languages, broaden W3C's geographical base, and encourage international participation in W3C activities. Specifically, the W3C Offices help organize meetings and workshops.

As a consortium of members from many European countries, ERCIM creates a balance between European diversity and necessary homogeneity by building bridges between different cultures and facilitating the movement of technical ideas within academia and across borders. W3C is very heavily swayed by its members, several of them having interests in the Web (such as HTML5, mobile Web, social Web, eGovernment, Web privacy, etc.) whereas ERCIM jointly has widespread interest in many research fields where Web standards are rarely used. ERCIM then helps to gather those Web communities and make them work together.

Moreover, ERCIM members have strong ties with industrial partners and start-up companies. This is an excellent opportunity for W3C to enlarge its cooperation with European industry, which can broaden its participation in the making of standards.

Finally, hosting the W3C allows ERCIM members to benefit from the know-how and expertise of the W3C team, and to increase its visibility based on W3C's worldwide reputation. The joint efforts of ERCIM and the W3C have started to increase Web research cooperation in Europe.

2013 Highlights

The Web is unparalleled in its support for innovation, from individuals, research, and enterprise. The Open Web Platform is transforming many industry sectors such as digital publishing, automotive, television, and entertainment. Signals in 2013 show the trend remains healthy:

Gartner strategic trends for 2014 (from October 2013, <http://kwz.me/xM>) names Mobile Apps and Applications the number two trend: "Gartner predicts that through 2014, improved JavaScript performance will begin to push HTML5 and the browser as a mainstream enterprise application development environment. Gartner recommends that developers focus on creating expanded user interface models including richer voice and video that can connect people in new and different ways."

In Developer Economics Q3 2013 (<http://kwz.me/xQ>) Vision Mobile reports that, "HTML5 has entrenched itself as a mobile development technology of choice, with 52% of the developer population using HTML5 technologies for developing mobile apps."

In Ten IT-enabled business trends for the decade ahead (<http://kwz.me/xR>), McKinsey & Company writes, "If companies can embrace Web-based business and operating models, they stand to gain far more than they lose. Social technologies, for example, are emerging as more than a powerful means of connecting with markets; they also are a means of communication and collaboration within and between businesses that has the potential to vastly improve productivity and organizational effectiveness."

eMarketer reports (<http://kwz.me/xU>) that TV advertising revenue is losing ground to digital advertising revenue, which has double digit growth.

Beihang University Becomes Newest Institution to Host W3C

As of 1st January 2013, Beihang University, MIT, ERCIM, and Keio University are jointly responsible for administering the activities of the Consortium. Beihang University becomes a new center for W3C technical staff and leadership activities in China. W3C anticipates that a dedicated presence in China will enhance opportunities for collaboration among Chinese companies, Web developers, and research institutes, and W3C's full international community, including Members from more than 40 countries.

Beihang University: <http://ev.buaa.edu.cn/>

Automotive Industry Launches W3C Group for Bringing Web to Cars

Stakeholders in the automotive industry launched the Automotive and Web Platform Business Group to accelerate the

adoption of Web technologies in the automotive industry in February 2013. The group convenes developers, automotive manufacturers and suppliers, browser vendors, operators and others to discuss how to enhance driving, safety, and passenger entertainment with the Open Web Platform. The group first focused on defining a Vehicle Data API that will create new opportunities for automotive services via the Web.

The Automotive and Web Platform Business Group: <http://www.w3.org/community/autowebplatform/>

W3C Training Courses - W3DevCampus

W3C offers a range of high quality training courses on topics such as HTML5, Responsive Web Design and Mobile Web applications. HTML5 courses included topics such as video, animations, forms, and APIs to create location-based services, and offline applications. In the Mobile Web apps. courses, participants learned how to program great mobile Web applications that can ship both online and in application stores. And in the Responsive Web Design course, students worked on viewport declarations and media-queries for responsive layout, responsive images, navigation, typography, tables, forms and video - not to forget best practices, accessibility and optimization.

W3DevCampus, the W3C online training for Web developers:

<http://www.w3devcampus.com/>

See also W3DevCampus' self-explanatory fun video.

New Digital Publishing Activity

W3C launched a new Digital Publishing Activity to make the Web a platform for the digital publishing industry, and to build the necessary bridges between the developers of the Open Web Platform and the publishing industry. Today's eBook readers and tablets for electronic books, magazines, journals and educational resources use W3C technologies such as (X)HTML, CSS, SVG, SMIL, MathML, or various Web APIs. Commercial publishers also rely on W3C technologies in their back-end processing all the way from authoring through to delivering the printed or electronic product and beyond. The publishing industry is one of the largest consumers of W3C technology.

The W3C Digital Publishing Activity, see

<http://www.w3.org/dpub/>

New W3C/ERCIM European projects started in 2013

- HTML5Apps: <http://html5apps-project.eu/>
- MediaScape: <http://www.mediascapeproject.eu/>
- DCENT: <http://dcentproject.eu/>
- Global ITV: <http://www.globalitv.eu/>
- Lider: <http://www.lider-project.eu/>
- Smart OpenData: <http://www.smartopendata.eu/>

Membership

After having successfully grown to become the most recognized ICST Society in Europe, acting as a hub to national ICST research via a national representative member, ERCIM has in 2011 opened membership to allow multiple members per country. Following requests during the last years, it is now possible for excellent research institutions in ICST per country to become members of ERCIM.

A member institute must be a leading research establishment in its country with excellent links to both its national and the international research communities. All ERCIM members are national centres of excellence and independent of specific commercial ties. They have a strong involvement in the research programmes of the European Union and joint projects with both small and medium-sized enterprises and large industrial companies.

Institutions member of ERCIM end of 2013:



Austrian Association for Research in IT
c/o Österreichische Computer Gesellschaft
Wollzeile 1-3, A-1010 Wien, Austria
<http://www.aarit.at/>



Consiglio Nazionale delle Ricerche
Area della Ricerca CNR di Pisa
Via G. Moruzzi 1, 56124 Pisa, Italy
<http://www.iit.cnr.it/>



Czech Research Consortium
for Informatics and Mathematics
FI MU, Botanická 68a, CZ-602 00 Brno, Czech Republic
<http://www.utia.cas.cz/CRCIM/home.html>



Centrum Wiskunde & Informatica

Science Park 123,
NL-1098 XG Amsterdam, The Netherlands
<http://www.cwi.nl/>



Fonds National de la Recherche Luxembourg

6, rue Antoine de Saint-Expéry, B.P. 1777
L-1017 Luxembourg-Kirchberg
<http://www.fnr.lu/>



FWO
Egmontstraat 5
B-1000 Brussels, Belgium
<http://www.fwo.be/>

F.R.S.-FNRS
rue d'Egmont 5
B-1000 Brussels, Belgium
<http://www.fnrs.be/>



Foundation for Research and Technology - Hellas
Institute of Computer Science
P.O. Box 1385, GR-71110 Heraklion, Crete, Greece
<http://www.ics.forth.gr/>



Fraunhofer ICT Group
Anna-Louisa-Karsch-Str. 2
10178 Berlin, Germany
<http://www.iuk.fraunhofer.de/>



Institut National de Recherche en Informatique
et en Automatique
B.P. 105, F-78153 Le Chesnay, France
<http://www.inria.fr/>



Norwegian University of Science and Technology
Faculty of Information Technology, Mathematics and
Electrical Engineering, N 7491 Trondheim, Norway
<http://www.ntnu.no/>



I.S.I. - Industrial Systems Institute
Patras Science Park building
Platani, PATRAS, Greece, 265 04
<http://www.isi.gr/>



Portuguese ERCIM Grouping
c/o INESC Porto, Campus da FEUP,
Rua Dr. Roberto Frias, n° 378,
4200-465 Porto, Portugal



Science & Technology
Facilities Council

Science and Technology Facilities Council
Rutherford Appleton Laboratory
Chilton, Didcot, Oxfordshire OX11 0QX, United Kingdom
<http://www.scitech.ac.uk/>



Spanish Research Consortium for Informatics and Mathematics
D3301, Facultad de Informática, Universidad Politécnica de Madrid
28660 Boadilla del Monte, Madrid, Spain,
<http://www.sparcim.es/>



SICS Swedish ICT
Box 1263,
SE-164 29 Kista, Sweden
<http://www.sics.se/>



Swiss Informatics Research Association
c/o Professor Abraham Bernstein, Department of Informatics,
University of Zurich, Binzmühlestrasse 14, CH-8050 Zürich
<http://www.sira.s-i.ch/>



Magyar Tudományos Akadémia
Számítástechnikai és Automatizálási Kutató Intézet
P.O. Box 63, H-1518 Budapest, Hungary
<http://www.sztaki.hu/>



University of Cyprus
P.O. Box 20537
1678 Nicosia, Cyprus
<http://www.cs.ucy.ac.cy/>



University of Southampton
University Road
Southampton SO17 1BJ, United Kingdom
<http://www.southampton.ac.uk/>



University of Warsaw
Faculty of Mathematics, Informatics and Mechanics
Banacha 2, 02-097 Warsaw, Poland
<http://www.mimuw.edu.pl/>



University of Wrocław
Institute of Computer Science
Joliot-Curie 15, 50-383 Wrocław, Poland
<http://www.ii.uni.wroc.pl/>



Technical Research Centre of Finland
PO Box 1000
FIN-02044 VTT, Finland
<http://www.vtt.fi/>

Benefit of ERCIM membership

ERCIM is a European-wide network internationally recognized as a representative organisation in its field. Members can benefit from easy access to all major ICST research groups in Europe. Members can take part in all ERCIM activities including research projects, Working Groups and in the ERCIM Alain Bensoussan Fellowship Programme supported by the European Union. They can also benefit from ERCIM's privileged partnership with standardisation bodies such as W3C and ETSI.

For further information about how to join ERCIM AISBL, please contact the ERCIM President
Domenico Laforenza
(domenico.laforenza@iit.cnr.it)



ERCIM

European Research Consortium
for Informatics and Mathematics

2004, Route des Lucioles
Sophia Antipolis
06410 Biot
France

Tel: +33 4 9238 5010
Fax: +33 4 9238 5011
contact@ercim.eu
<http://www.ercim.eu>
http://twitter.com/#!/ercim_news
<http://www.linkedin.com/groups/ERCIM-81390>

