Catalogue

of
- **European Technology Platforms**
- **Networks of Excellence**

INTRODUCTION

About ISTOK-SOYUZ project

ISTOK-SOYUZ (www.istok-soyuz.eu) ("Information Society Technologies to Open Knowledge for Eastern Europe and Central Asia") is supported by the European Commission to explore new opportunities for ICT collaboration between European Union (EU) and Eastern Europe and Central Asia (EECA) countries and to foster the EU ICT programme awareness activities in order to increase the number of the international collaboration projects involving partners from EECA countries, in particular, Russia, Ukraine, Belarus, Armenia and Kazakhstan.

Why should I read this?

This Catalogue includes a list and a brief overview of several European Technology Platforms (ETP) and Networks of excellence (NoE), which expressed underlined interest in collaboration with EECA organisations, working in the ICT field. This Catalogue could help EECA organisations to identify new strategic partners for future cooperation among relevant European ICT Networks (ETP and NoE).

Why it is beneficial for EECA organisations to join ETP/NoE?

Joining ETP and NoE could be beneficial for EECA organisations by increasing their visibility in the European arena. This action could support the transition of EECA science and technology results towards the businesses and market that could also allow to progressively moving the EECA Science sector- traditionally based on Fundamental Research - towards Applied Research strongly oriented around market needs. Joining ETP and NoE could also pave the way to extending the network of EECA organisations. Furthermore, EECA research teams could have the opportunity to participate and to obtain privileged access to numerous ICT related events, organised by the ETP and NoE. Overall, the EECA research teams could benefit from the real opportunity to extend the potentialities within the research field, to perform ideas, knowledge, know-how capabilities, and to open new technological markets.

How could ISTOK-SOYUZ help EECA organisations?

In order to connect teams and research organisations from 5 target countries (Russia, Ukraine, Armenia, Belarus and Kazakhstan), to ICT related European Technology Platforms (ETP) and Networks of Excellence (NoE), ISTOK-SOYUZ offers its assistance in partners' search, integration of EECA partners into ETP and NoE networks and partnerships building.

- Immediate actions could include introduction of your organisation to the main ETP and NoEs.

- Medium term actions would include the building of partnerships through consortia to be proposed to future FP7-ICT calls and encourage new memberships in these networks. The ISTOK-SOYUZ project could cover subscription fees if needed.

This Catalogue is prepared by ISTOK-SOYUZ project if the framework of the Visibility campaign, launched by the project in EECA Countries.

For more information, please contact:

Ms. Gergana HRISTOZOVA: g.hristozova@inno-group.com

Mr. Nikolay PAKULIN: npak@ispras.ru

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Contacts List[1]

Name	URL	Contact
Advanced engineering materials and technologies - EUMAT	http://www.eumat.org/	mail@eumat.org.
Embedded computing systems – ARTEMIS	https://www.artemisia-association.eu/	ad.ten.berg@artemisia-association.eu
European technology platform on smart systems integration – EPoSS	http://www.smart-systems-integration.org	contact@smart-systems-integration.org
Mobile and wireless communications – EMOBILITY	http://www.emobility.eu.org/	fiona.williams@ericsson.com
Networked and Electronic Media - NEM	http://www.nem-initiative.org/	Jsesena@rose.es
Networked European software and services initiative – NESSI	http://www.nessi-europe.com	bruno.francois-marsal@thalesgroup.com
PHOTONICS21	http://www.photonics21.org	secretariat@photonics21.org
Network of excellence on virtual reality and virtual environments applications for future workspaces - INTUITION	http://www.intuition-eunetwork.org/	cse@kiv.zcu.cz
High performance and embedded architecture and compilation - HIPEAC	http://www.hipeac.net/	membership@hipeac.net
Social signal processing network - SSPNET	http://sspnet.eu/	Alessandro.vinciarelli@idiap.ch
Software services and systems network - S-CUBE	http://www.s-cube-network.eu/	contact@s-cube-network.eu
Peer-to-peer tagged media - PETAMEDIA	http://www.petamedia.org	info@petamedia.eu
Cooperating objects network of excellence - CONET	http://www.cooperating-objects.eu/	aollero@cartuja.us.es

[1] The List covers the ETP and NoE, which expressed clear interest in the ISTOK-SOYUZ Visibility campaign and agreed to be published in the ISTOK-SOYUZ Catalogue of ETP and NoE

European Technology Platforms

ETP provide a framework for stakeholders, led by industry, to define research and development priorities, timeframes and action plans on a number of strategically important issues where achieving Europe's future growth, competitiveness and sustainability objectives is dependent upon major research and technological advances in the medium to long term.

They also play a key role in ensuring an adequate focus of research funding on areas with a high degree of industrial relevance, by covering the whole economic value chain and by mobilizing public authorities at national and regional levels. In fostering effective public-private partnerships, technology platforms have the potential to contribute significantly to the renewed Lisbon strategy and to the development of a European Research Area of knowledge for growth. As such, they are proving to be powerful actors in the development of European research policy, in particular in orienting the Seventh Research Framework Programme to better meet the needs of industry.

ETP address technological challenges that can potentially contribute to a number of key policy objectives which are essential for Europe's future competitiveness, including the timely development and deployment of new technologies, technology development with a view to sustainable development, new technology-based public goods and services, technological breakthroughs necessary to remain at the leading edge in high technology sectors and the restructuring of traditional industrial sectors.

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[2] http://cordis.europa.eu/technology-platforms/

1. ADVANCED ENGINEERING MATERIALS AND TECHNOLOGIES (EUMAT)

Website: http://www.eumat.org/

EuMaT – European Technology Platform for Advanced Engineering Materials and Technologies has been launched in order to assure optimal involvement of industry and other important stakeholders in the process of establishing of R&D priorities in the area of advanced engineering materials and technologies. EuMaT should improve coherence in existing and forthcoming EU projects, and lead to (according the EU list of keywords):

- "Radical Change"
- "Sustainable Development

Main objective of EuMaT is to produce: The Strategic Research Agenda which, with appropriate involvement of industry and other main stakeholders will provide basis for identification of needs and establishing priorities in the area of advanced materials and technologies. In addition, EuMaT will promote interdisciplinary education and training, and technology transfer and innovation societal consi¬derations in the R&D (e.g. potential impacts on public health, safety, environmental risks) cooperation and initiatives at international level EuMaT will be open to all the interested new members accepting EuMaT goals, principles and statutes.

Task groups of EuMaT

The practical work of EuMaT will be defined around the following main issues (the partners' views on their importance/priorities, current interests and their future plans will be polled):

a) TASK GROUP STRATEGIC RESEARCH AGENDA and communication with
b) EU TASK GROUP Follow-up of, interaction with and concerting of new
c) PROPOSALS and PROJECTS (e.g. in FP6 and FP7)

DYNAMIC MATERIAL-TOPIC-CENTERED TASK GROUPS covering various Advanced Engineering Materials for different Types of Applications, e.g.:

- Nanostructured materials (nano-powders): ceramic materials and intermetallic alloys
- Fiber-based composites; SiC-based materials
- Multimaterial (hybrid) systems: Metals-plastic, ceramics-metals, compounds...
- Materials with functionally gradient composition or structure (FGM)
- Thin/thick films and coatings: magnetic films, thermal barrier (TBC), corrosion protection...
- High-temperature materials: heat sink materials, creep resistant materials (structural materials for long term application incl. lightweight aspects and oxidation resistance), in particular metals, composites and coating systems
- High strength and corrosion resistant materials (ultra steels, materials for bridges, marine environment, pressure equipment...)

- Self-passivating materials
- Radiation resistant materials
- Biomaterials (implants, FGM ceramic artificial joints, functional materials for enhanced human well-being (e.g.: anti-bacterial, isothermal, etc.), engineering polymers, soft materials...
- Materials for microdevices; magnetic thin films, sensors, materials for memory storage magnetic thin films, GaN, GaAlN
- Cryogenic, hydrogen storage materials: (CeLa) – (NiCoCuFe), quasicrystals (Ti–V–Zr–Ni)...
- Catalytic materials for new combustion systems (e.g.: alternative fuels, micro-combustor, etc.)

as well as the particular topics like:

d) MODELING of advanced materials: properties, functional behavior, simulation, life-time, impacts...on all scales
e) MATERIALS PRODUCTION TECHNOLOGIES for advanced materials with optimized microstructure and heat treatment and manufacturing technologies (stabilized precipitations, DS, CC..) … also to include forming, shaping, welding, brazing, bonding and similar
f) Advanced MATERIALS TESTING, CHARACTERIZATION AND QUALIFICATION
g) Development of DATA SYSTEMS (e.g. for material selection, material data bases, simulation systems, etc.)
h) PRE-NORMATIVE WORK and STANDARDIZATION
i) DISSEMINATION: publications, conferences, web…Coordination of exploitation issues
j) COLLABORATION with other TP's, international cooperation, etc.

EuMaT Expression of Interest (EoI)

You have a posibility to express your interest in EuMaT online using the form shown bellow. The procedure is quite simple and it consists of few steps. You need to provide your contact data, to explain your interest in EuMaT and fill out the inquiry.

Contact:

mail@eumat.org
Prof. Michal Basista
Tel: +48 22 828 53 74
Michal.Basista@kmm-vin.eu

2. EMBEDDED COMPUTING SYSTEMS – ARTEMIS

Website: https://www.artemisia-association.eu/

ARTEMISIA is the association for R&D actors in Advanced Research & Technology for EMbedded Intelligence and Systems. The association was founded in January 2007 by Daimler, Nokia, Philips, STMicroelectronics and Thales. Its purpose is to support the ARTEMIS Joint Undertaking and to continue the work of the ARTEMIS European Technology Platform.

Mission

The ARTEMISIA Mission is to bring together leading industrial groups, SMEs and academic research institutes and represent them towards the European Commission and interested Member States. ARTEMISIA is responsible for the ARTEMIS Strategic Research Agenda that was set up by the European Technology Platform in March 2006. Since then Annual Work Programme and Multi-Annual Strategic Plans deploy the Agenda in tactics and strategy.

The vision of ARTEMIS is that embedded systems will realise the dream of ambient intelligence. In which intelligent support for people will be embedded in everyday objects. Large-scale application will increase our quality of life. The result will be to help make life healthier and more secure. And to provide more comfort for Europe's ageing population. ARTEMISIA nurtures the ambition to strengthen Europe's position in embedded intelligence and systems and to attain world-class leadership.

ARTEMISIA Presidium

Daimler A.G., Klaus Grimm, Germany, President

Thales S.A.   , Dominique Vernay, France, Vice-President / Secretary

Finmeccanica, Giovanni Barontini, Italy, Vice-President / Treasurer

Dassault Systemes, François Bichet, France, Vice-President

Contact:

Ad ten Berg
E-mail: ad.ten.berg@artemisia-association.eu
Mobile: + 31 6 22 410710

3. EUROPEAN TECHNOLOGY PLATFORM ON SMART SYSTEMS INTEGRATION – EPOSS

Website: http://www.smart-systems-integration.org

EPoSS, the European Technology Platform on Smart Systems Integration, is an industry-driven policy initiative, defining R&D and innovation needs as well as policy requirements related to Smart Systems Integration and integrated Micro- and Nanosystems. EPoSS is contributing to the Lisbon Strategy, aiming at boosting economic growth, creating more and better jobs and ensuring sustainable prosperity in Europe.

A group of major industrial companies and research organizations from more than 20 European Member States intend to co-ordinate their activities in Smart Systems Integration. A main objective is to develop a Vision and to set-up a Strategic Research Agenda on Innovative Smart Systems Integration.

EPoSS brings together European private and public stakeholders in order to create an enduring basis for structuring initiatives, for co-ordinating and bundling efforts, for setting-up sustainable structures of a European Research Area on Smart Systems Integration. EPoSS embraces all key players, public and private, in the value chain so as to

+ provide a common European approach on Innovative Smart Systems Integration from research to production outlining the key issues for a strategic European innovation process
+ formulate a commonly agreed roadmap for action (updating, assembling and completing existing material and approaches) and provide a strategic R&D agenda
+ mobilise public and private human, infrastructural and financial resources, and
+ define priorities for common research and innovation in the future.

The initiative is of immediate importance in view of defining research and technology priorities for the EU's 7th Framework Programme, for raising more critical mass and resources and for coordinating between different initiatives (national, regional, EUREKA, European public funding, and industry).

Membership

In order to consolidate the EPoSS activities, a sustainable financial basis has to be created which allows to stabilise the day-to-day business of the EPoSS Office and to provide the necessary services.

It was therefore decided at the EPoSS Launch Meeting in Brussels on July 5th 2006 - and specified at the EPoSS Steering Group meeting in Berlin - to distribute the financial burden on as many shoulders as possible by asking the EPoSS members for a small contribution to the costs like other technology platforms do.

Contributions are as follows:

Large Companies (>250 employees):   4,000 €
SMEs and public research institutions: 2,000 €
Universities: 1,500 €

This contribution is not intended to be a formal membership fee, but it is a remuneration for the services provided (i.e. cost sharing for maintaining the organisational structure and the activities of the EPoSS Office).

Your contribution as EPoSS member will provide you a series of advantages as it will allow you amongst others to:

1) access the internal area of the EPoSS web portal;
2) have unlimited access to the EPoSS Working Groups and to receive information from internal sessions;
3) facilitate your access to European projects and funding and to receive information on Commission decisions;
4) participate at EPoSS internal meetings free of charge;
5) obtain a reduced participation fee for the annual EPoSS conference;
6) have privileged access to other smart systems events connected to EPoSS.

Upcoming Events

SSI - Smart Sytems Integration 2010

Como, from 23-03-2010 to 24-03-2010 12:00

European Conference and Exhibition on Integration Issues of Miniaturized Systems

http://www.smart-systems-integration.org/public/news-events/events/copy_of_smart-systems-integration-2009-ssi-2009

Contact:

Mr. Wolfgang Gessner

contact@smart-systems-integration.org

Tel.: +49 30 310078-155

4. MOBILE AND WIRELESS COMMUNICATIONS – EMOBILITY[3]

Website: http://www.emobility.eu.org/

The Platform will define and implement a comprehensive research agenda in the mobile and wireless sector to be conducted in Europe, on the basis of a strong co-ordination of the national research efforts as well as the collaboration of key research programmes from other regions of the world. Peer-to-peer relations with Asian and American research programs should be established to facilitate the emergence of an early consensus and hence to paving the way for successful global standards.

The eMobility Technology Platform has currently these Working Groups

≡ *Applications*

The following objectives were established for this Working Group, concerning Mobile & Wireless Communication (M&W Comms.):

- To establish further links between M&M Comms. and other areas
- To find new applications for M&M Comms.
- To get disruptive ideas for R&D in M&W Comms.
- To gather further contributions to the SRA (Strategic Research Agenda)
- To establish an SAA (Strategic Applications Agenda)

≡ *Broadband for Europe*

≡ *Post-IP Roadmap and milestones*

≡ *Roadmaps*

≡ *Testing Facilities*

Membership

The eMobility Technology Platform has currently (December 2008) 582 members. In the category "Research Domain" there are 219 members, "Industry" 126 members and "SME" 237 members.

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[3] Only for organizations, having a base in Europe

Why to join

The eMobility Technology Platform membership gives all member organisations (that fulfill the mandatory membership criteria) the possibility to influence where the research related to future communication systems in the area of mobile and wireless is going within the EU's Framework Programme 7 and beyond. Members will receive up-to-date information on eMobility General Assemblies, Workshops and other events. Members also have the chance to contribute and provide feedback to the Strategic Research Agenda.

Membership criterias

In short, there are two mandatory criteria that each member candidate has to fulfill:

- A base in Europe
- Willingness to contribute to the joint research work

There are four membership categories (one must be chosen on the membership application form):

- Industry

- Research domain (universities, research centres, etc.)

- SME (Small and Medium Size Enterprises)

- Other (institutions, pre-standardisation bodies, state organisations, etc.)

SMEs can get further help and advice in participating in eMobility and other Technology Platforms from the EPISTEP project.

How to join

Membership Application Form
(http://www.emobility.eu.org/membership_application.html).

Applications are processed roughly quarterly and all applicants will be informed about the results. Membership is currently for free.

Contact:

Dr. Fiona Williams
fiona.williams@ericsson.com
Tel.: +49 2407 575103

5. NETWORKED AND ELECTRONIC MEDIA – NEM

Website: http://www.nem-initiative.org/

Overview

The Networked and Electronic Media (NEM) Initiative is focused on an innovative mix of various media forms, delivered seamlessly over technologically transparent networks, to improve the quality, enjoyment and value of life. NEM represents the convergence of existing and new technologies, including broadband, mobile and new media across all ICT sectors, to create a new and exciting era of advanced personalised services. The NEM is an industry-led Initiative to promote and direct the large-scale initiative needed to accelerate the pace of innovation and rate of technology evolution to the level that will place European Industry at the forefront of the technology and give users an incredible choice of services. All these efforts will bear in mind the evolutionary framework from home and office environments towards broadband extended home and office environments.

Members of the NEM Initiative come from various industry sectors as well as research and regulatory institutions: Academia, Technology centres, Broadcasters, Consumer and professional equipment manufacturers, Regulatory and policy makers, Service providers, and Telecom operators. They are all involved in work of the Initiative through NEM organisational bodies and working groups.

Registration form for new members

Membership is open to all and members will be encouraged to actively participate in NEM events and contribute to NEM activities. General Assembly members elect the NEM Steering Board; endorse the NEM Vision and the NEM Strategic Research Agenda (SRA) as well as the policies and content of the initiative. All members are welcome to participate in the GA meetings.

Outline of the NEM platform

The NEM Technology Platform should be a technological undertaking in the broadest sense including road mapping, common experimental platforms, experimentation of business

models, and feedback on customer experience and technology adoption by consumers. Technology Platform projects should "tile" the R&D needs of the NEM sector (each project covering an area complementary to other projects).

One key objective is to build a pan-European NEM infrastructure as a sustainable technology carrier allowing integration of projects results, as a permanent evaluation facility, to test and validate service models, and as a vehicle for international cooperation. Furthermore, the NEM Technology Platform stimulates worldwide development of regulations and standardisation policies, promotes, and develops international cooperation.

How to join

Membership Application form:

http://www.nem-initiative.org/public/membership/membership_form.asp

Contact :

Pierre-Yves Danet

pierreyves.danet@orange-ftgroup.com

info@nem-initiative.org

Phone: +33 2 96051155

6. NETWORKED EUROPEAN SOFTWARE AND SERVICES INITIATIVE – NESSI

Website: http://www.nessi-europe.com

NESSI is the European Technology Platform dedicated to Software and Services. Its name stands for the Networked European Software and Services Initiative.

Seizing the transformation opportunity

Information and Communication Technology (ICT) is an essential driving force for innovation and a core enabler of economic growth in the coming years. Enterprises in Europe (both private and public sector) are facing significant structural changes and will rely on software and services to support them in adapting effectively.

This represents a new opportunity for Europe and the NESSI initiative embodies the strategic mechanism through which this opportunity can be seized and exploited globally. Application of innovative technologies will benefit all economic sectors, not just the software and ICT services industry. Globally competitive businesses and efficient public services will benefit all citizens.

Europe faces a period of potentially profound changes: in social attitudes, economic conditions and the business environment. This makes the ability to evolve continuously essential for the users of services, and therefore for the technology used to deliver them. Technology must be an enabler of change rather than an inhibitor. Enlargement of the European Union and the changing nature of trade with the rest of the world puts a strong emphasis on a multicultural approach to business. This cannot be simply regarded as the need to use different languages, but rather there is a need to adapt more fully to the ways people behave and communicate in different countries and cultures.

Focusing on Services

The main focus of NESSI is that of service. There are many definitions of service used in different contexts. However, all are based on the same principle: a service consumer does not own the service and therefore need not be concerned with all the aspects generally associated with ownership such as infrastructure, technology, integration and maintenance. Instead, he/she has only to choose a service, which meets his business needs.

Businesses are increasingly concentrating on activities where they can gain a competitive advantage. Supporting capabilities can be obtained as services from specialist providers.

In this context, NESSI is about transforming the EU economy through Service Oriented business models.

The overall ambition of NESSI is to deliver NEXOF, a coherent and consistent open service framework leveraging research in the area of service-based systems to consolidate and trigger innovation in service-oriented economies.

The three core elements of NEXOF

- NESSI Open Reference Model: an open specification, which includes the conceptual model of the core elements that enable service-based ecosystems and their relationship as well as underlying rules, principles and policies, which lead to interoperable implementations. Core elements include business dynamics, development environment and operational environment.
- NESSI Open Reference Architecture addressing definition and selection of innovative architectural styles and patterns based on the reference model. Our overall ambition being here to pave the way towards a standardized Open Reference Architecture for services and components but also to some extent processes which corresponds to a significant advancement of today's service-oriented architectures (even service-component ones). This will include the definition of the infrastructure requirements.
- NESSI Open Reference Implementation taking the responsibility to deliver to the community at large with the implementation of the NEXOF concepts and approaches where the openness, built on open source and open standards, encompasses three important concepts:
  - open leading to free usage by other players
  - open guaranteeing the rights for others to derive new commercial implementations
  - open for all to participate.

The delivery of the NESSI Open Reference Implementation (including tools and methods) in an open source environment is key for the NESSI approach to be tested and to gain momentum in various communities of potential users and to address and serve the development of a service-oriented economy.

It is important to specify that in our use of the terms "open source", we refer to the licensing model as opposed to the development process, where other schemes are adequate alternatives. Furthermore, the licensing scheme must allow derivative works.

These three core elements are complemented with NEXOF's Test and Validation Suite to allow all future instances of NEXOF to be validated for coherence and consistency with respect to NEXOF principles as specified in both NEXOF Reference Model and NEXOF Reference Architecture.

NESSI's Organisation

NESSI is coordinated by industry and academia and aims at uniting all ICT stakeholders through active contributions and involvements in the

* elaboration and evolution of its Strategic Research Agenda

* definition, implementations and delivery of NEXOF, the NESSI Open Service Framework

NESSI is totally open and encourages all levels of involvement, from "staying aware" to "being actively involved". It has implemented an open contribution model, managed through NEXOF-RA Strategic Project to ensure that contributions can be made in a consistent and coherent approach to NEXOF.

Joining NESSI as Member

Joining NESSI as a member is a process that is continuously open and is available on-line. Membership is free and simply requires the signature of the NESSI Letter of Intent that specifies that members support the NESSI Vision. Members participate to NESSI Working Groups.

Joining NESSI as Partner

Joining NESSI as a Partner is a process that opens at specific dates.

Events

- 22/03/2010 26/03/2010 European Joint Conferences on Theory And Practice of Software etaps10_satellite_events@cs.ucy.ac.cy Coral Beach Resort, Paphos Cyprus George A. Papadopoulos, george@cs.ucy.ac.cy Call for Satellite Events
- 24/11/2009 27/11/2009 ICSOC/ServiceWave 2009 www.servicewave.eu Stockholm Sweden ETPs None yet - to be published   Organisation
- 23/11/2009 24/11/2009 FIA -Stockholm http://www.fi-stockholm.eu Stockholm Sweden European Commission None yet - to be published   Organisation / Sessions

Contact :

Bruno FRANCOIS-MARSAL

bruno.francois-marsal@thalesgroup.com

7. PHOTONICS21

Website: http://www.photonics21.org

Photonics21 is a voluntary association of industrial enterprises and other stakeholders in the field of photonics in Europe. It unites the majority of the leading Photonics industries and relevant R&D stakeholders along the whole economic value chain throughout Europe. Presently, we can count as members more than 1,400 stakeholders who come from 49 countries.

Photonics21 undertakes to establish Europe as a leader in the development and deployment of Photonics in five industrial areas (Information and Communication, Lighting and Displays, Manufacturing, Life Science and Security) as well as in Education and Training.

Its mission is the coordination of the research and development activities in Europe among all the contributing partners from education, basic research, applied research and development to manufacturing and all relevant applications.

The entry into the "photon century" requires a shared European initiative that enables industry and research to uphold their outstanding initiatives to explore the nearly limitless future applications of light and to reap the expected benefits in terms of creating both jobs and wealth. Many important European industries, from chip manufacturing and lighting, health care and life sciences, to space, defense and the transport and automotive sectors rely on the same fundamental mastery of light. Without strong European leadership in photonics technologies, these industries will be left vulnerable to strong competition from the USA and Asia.

Photonics21 is a voluntary association of industrial enterprises and other stakeholders in the field of photonics in Europe. Photonics21 is no legal body and possesses no legal form. Today the platform unites more than 1,400 stakeholders from 49 countries.

Who are the members?

All those who are involved with applied research, technical development and practical application of optical and photonic technologies can become a member. However, the main reason for which European Technology Platforms have been launched is to better align EU research priorities with industry's needs. Thus, in particular, industrial enterprises and research institutions working at the industrial-scientific interface are called upon to join Photonics21. Representatives of public bodies and governmental organisations involved with research and innovation in the field of photonics are invited to participate via the Mirror Group of Photonics21.

Why to join?

Becoming a member of Photonics21 is an opportunity to be integrated into a European network of Photonics experts. Furthermore, you will have the possibility to present your point of view in your work group and to influence the future research in the field of

photonics. Every two month, members receive a newsletter providing information on platform's activities; they also have access to a privileged member area within in the Photonics21 website.

Application Form

http://www.photonics21.org/MemberArea/register.php

Contact:

Markus Wilkens
+49 (0) 211 6214-478
secretariat@photonics21.org

Networks of Excellence[4]

Network of Excellence is an instrument for strengthening excellence by tackling the fragmentation of European research, where the main deliverable is a durable structuring and shaping of the way that research is carried out on the topic of the network. NoE are designed to strengthen scientific and technological excellence on a particular research topic through the durable integration of the research capacities of the participants.

They aim to overcome the fragmentation of European research by:
- *gathering the critical mass of resources*
- *gathering the expertise needed to provide European leadership*

NoE also have to spread excellence beyond the boundaries of its partnership.

Projects must include a training component in the frame of their "spreading of excellence" activities.

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[4] http://cordis.europa.eu/fp6/instr_noe.htm

1. NETWORK OF EXCELLENCE ON VIRTUAL REALITY AND VIRTUAL ENVIRONMENTS APPLICATIONS FOR FUTURE WORKSPACES (INTUITION)

Website: http://www.intuition-eunetwork.org/

Virtual Reality (VR) technology is still a rapidly evolving and diversifying field. The massive research and development process has reached a degree, which makes a pan-European structuring and integrating effort an absolute necessity. In addition, VR technology has started being used to an extent in industrial applications; this has been processed though through an unorganised way, lacking of long-term vision and dealing with case-by-case scenarios. Thus, a critical milestone is facilitate the adoption of VES in industrial processes and assess the impact of its "penetration" into the workplace and everyday life in terms of cost-effectiveness, health hazards and side-effects of the users and its impact on the actual working environment, on an individual and organizational level. INTUITION major objective is to bring together leading experts and key actors across all major areas of VE understanding, development, testing and application in Europe, including industrial representatives, SMEs and key research institutes, universities and major international organisations or associations in order to overcome fragmentation and promote VE establishment within product and process design. Its major objectives include the integration of resources and VR equipment all around Europe, the structuring of European Research Area at VR and the promotion of Europe as a leading force in this field worldwide. To perform this, a number of activities will be carried out in order to establish a common view of VE technology current status, open issues and future trends. These activities will include integration of human and infrastructure resources, research structuring, spreading of excellence and disseminating tasks. The vast number of partners is controlled by a firm managerial Structure. Strong links with National relevant Networks, current National and EU-funded projects and clustering activities with new initiatives as well will assist in structuring the VR European Research Area.

Contact:

Prof.Ing.Vaclav Skala, CSc.
Secretary:
cse@kiv.zcu.cz
e-mail: skala@kiv.zcu.cz

2. HIGH PERFORMANCE AND EMBEDDED ARCHITECTURE AND COMPILATION – HIPEAC

Website: http://www.hipeac.net/

The goal of the HiPEAC Network of Excellence is

- to join forces in Europe to collectively work on the HiPEAC strategic research agenda,
- to realize European excellence in computing architectures, system software and platforms to enable the development of new applications, and
- to allow European companies to achieve world-leading positions in computing solutions and products.

In order to reach that goal, HiPEAC

- will stimulate mobility between partners (internships, sabbaticals, research visits, cluster meeting),
- will coordinate and steer research in 9 research clusters: (i) Multi-core architecture, (ii) Programming models and operating systems, (iii) Adaptive compilation, (iv) Interconnects, (v) Reconfigurable computing, (vi) Design methodology and tools, (vii) Binary translation and virtualization, (viii) Simulation platform, (ix) Compilation platform, and
- will spread excellence by running the HiPEAC conference, the ACACES summer school, the HiPEAC journal, a newsletter, a website, seminars, technical reports, workshops, and awards.

This program of activities will lead to the permanent creation of a solid and integrated virtual centre of excellence consisting of several highly visible departments, and this virtual centre of excellence will have the necessary critical mass to really make a difference for the future of computing systems in Europe, both for academia and for industry, and in the commodity, the high performance as well as in the supercomputing markets.

Contact:

Koen De Bosschere

membership@hipeac.net

3. SOCIAL SIGNAL PROCESSING NETWORK (SSPNET)

Website: http://sspnet.eu/

The mission of the SSPNet is to create a sufficient momentum by integrating an existing large amount of knowledge and available resources in Social Signal Processing (SSP) research domains including cognitive modelling, machine understanding, and synthesizing social behaviour, and so:

(i) enable creation of the European and world research agenda in SSP,

(ii) provide efficient and effective access to SSP-relevant tools and data repositories to the research community within and beyond the SSPNet, and

(iii) further develop complementary and multidisciplinary expertise necessary for pushing forward the cutting edge of the research in SSP.

The collective SSPNet research effort will be directed towards integration of existing SSP theories and technologies, and towards identification and exploration of potentials and limitations in SSP. A particular scientific challenge that binds the partners is the synergetic combination of human-human interaction models and tools for human behaviour sensing and synthesis within socially adept multimodal interfaces.

Contact:

Alessandro VINCIARELLI
Alessandro.vinciarelli@idiap.ch

4. SOFTWARE SERVICES AND SYSTEMS NETWORK (S-CUBE)

Website: http://www.s-cube-network.eu/

S-Cube, the Software Services and Systems Network (http://www.s-cube-network.eu) will establish a unified, multidisciplinary, vibrant research community which will enable Europe to lead the software-services revolution.

By integrating diverse research communities, S-Cube intends to achieve worldwide scientific excellence in a field that is critical for European competitiveness. S-Cube will accomplish its aims by meeting the following objectives:

- Re-aligning, re-shaping and integrating research agendas of key European players from diverse research areas and by synthesizing and integrating diversified knowledge, thereby establishing a long-lasting foundation for steering research and for achieving innovation at the highest level.
- Inaugurating a Europe-wide common program of education and training for researchers and industry thereby creating a common culture that will have a profound impact on the future of the field.
- Establishing a pro-active mobility plan to enable cross-fertilization and thereby fostering the integration of research communities and the establishment of a common software services research culture.
- Establishing trust relationships with industry via European Technology Platforms (specifically NESSI) to achieve a catalytic effect in shaping European research, strengthening industrial competitiveness and addressing main societal challenges.

S-Cube will produce an integrated research community of international reputation and acclaim that will help define the future shape of the field of software services. S-Cube will provide service- engineering methodologies which facilitate the development, deployment and adjustment of sophisticated hybrid service-based systems. S-Cube will further introduce an advanced training program for researchers and practitioners.

Associate Members:

- Receive travel and subsistence funding;
- Have access to S-Cube internal information;
- Are invited to attend S-Cube meetings;
- Are invited to attend and contribute to the training and educational activities;

Associate Member Process

The process for becoming an Associate Member, as well as the rights and duties of Associate Members are described on the following web address:
http://www.s-cube-network.eu/contact/subpages/associate-partner-process.

Contact:

contact@s-cube-network.eu

PEER-TO-PEER TAGGED MEDIA (PETAMEDIA)

Website: http://www.petamedia.org).

In the Netherlands, Switzerland, UK, and Germany, national networks exist of collaborating excellent research groups in the areas of multimedia content analysis (MCA) and social and peer-to-peer (SP2P) networks. The Network of Excellence PetaMedia brings these four strong national networks together, at first to form a European network of national networks, and eventually to establish a sustainable European virtual centre of excellence to which research groups throughout Europe can connect. The four core partners of the project represent and coordinate the respective national networks; they are responsible for linking up EU national partners to the NoE.

The purpose of joining four national networks is to achieve larger momentum, to integrate available resources, and to further develop complementary expertise necessary for pushing new paradigms in enabling efficient and effective access to multimedia content in emerging network structures. The collective research effort that thus comes available will be directed towards integration of existing MCA and SP2P technologies, and towards identification and exploration of potentials and limitations of MCA/SP2P combinations. A particular scientific challenge that binds the partners is the synergetic combination of user-based collaborative tagging, peer-to-peer networks and multimedia content analysis. Solutions and collaborative research field trials will be built on the coordinating partner's open source P2P software Tribler.

The NoE will foster the linking up of researchers in the area of MCA and SP2P, resulting in a closer and harmonized collaboration at both European and national level. It is the ambition of the NoE to become an internationally renowned research centre with impact on national and European research funds in the MCA/SP2P area. The centre also takes up the challenge to create international research proposals based on complementary expertise of partners in national research networks.

Contact:

Pien Rijnink
info@petamedia.eu

5. COOPERATING OBJECTS NETWORK OF EXCELLENCE (CONET)

Website: http://www.cooperating-objects.eu/

The main goal of CONET is to build a strong community in the area of Cooperating Objects capable of conducting the needed research to achieve, in the long run, the vision of Mark Weiser.

Therefore, the objectives of CONET are the following:

- Create a visible and integrated community of researchers on the topics related to Cooperating Objects capable of driving the domain in the coming years.
- Identify, arise awareness and steer academic research efforts towards industry-relevant issues without forgetting fundamental scientific issues; make the community more reactive to novel issues and approaches, and to coordinate its efforts; establish tight relationships with the European industry, leveraging interactions with leading US institutions in the field.
- Stimulate cooperation between researchers from the three domains in order to achieve a lasting and sustainable architecture that is able to cope with the vision of Cooperating Objects.

Modalities of Membership in CONET

Core Partners

The institutions that belong to the group of Core Partners has been fixed at the beginning of the project and will not change during the lifetime of CONET. The 16 Core Partners are responsible for the execution and management of activities, as detailed in the Description of Work. Core Partners have priority access to all common resources such as testbeds, funding of research personell, etc.

Prof. Dr. Pedro Jose Marron (pjmarron@cs.uni-bonn.de), from the University of Bonn, is the Coordinator of CONET.

Prof. Dr. Anibal Ollero (aollero@cartuja.us.es), from AICIA-CATET, in Seville, Spain, is the Associated Coordinator of CONET.

Associated Members

Associated members are excellent institutions that volunteer to participate in administrative tasks for the network in exchange of having priority access to common resources from the network, such as testbeds, as well as priority access to funding of research personnel. In addition, selected associated members will be represented in the steering committee and may commit themselves to develop certain parts of joint research. Induction to the category of associated member is by invitation of a core partner only.

Members

Member Institutions of CONET can become all departments and institutions that do research in the areas defined by the CONET project and submit the "Application for Membership Form". New members will be accepted by the CONET Steering Committee on a regular basis and by no means longer than every three months.

Contact:

Anibal Ollero
aollero@cartuja.us.es

ANNEX: List of other European ICT Networks (ETP/NoE) which are either not open to EECA participation or who did not express particular interest in integrating EECA organizations into their networks

Name	URL
AENEAS	http://www.eniac.eu/web/aeneas/aeneas_ex.php
SMARTGRIDS	www.smartgrids.eu/
INTEGRAL SATCOM INITIATIVE – ISI	http://www.isi-initiative.org/
ROBOTICS – EUROP	http://www.robotics-platform.eu/cms/index.php
HUMAN-MACHINE INTERACTION NETWORK ON EMOTION (HUMAINE)	http://emotion-research.net/projects/humaine/aboutHUMAINE
SUSTAINING TECHNOLOGY ENHANCED LEARNING LARGE-SCALE MULTIDISCIPLINARY RESEARCH (STELLAR)	http://www.stellarnet.eu/
NEARCTIS	http://www.nearctis.org/
PHOTONICS4LIFE	http://www.photonics4life.eu/
EURO-FOS	http://www.euro-fos.eu/
NOE POLYNET	http://www.noe-polynet.eu/public
VPH NOE	http://www.vph-noe.eu/
NEWCOM++	http://www.newcom-project.eu/
PASCAL2	http://www.pascal-network.org/
ECRYPT II	http://www.ecrypt.eu.org/
EURO-NF	http://euronf.enst.fr/en_accueil.html
BONE	http://www.ict-bone.eu/portal/landing_pages/bone_about.html
NANOSIL	http://www.nanosil-noe.eu/nanosil/