

Examples of Successful Participation of Georgian Scientists in EC Framework Programs and Perspectives of Future Cooperation

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Short review of International Scientific programs in Georgia

- In my presentation, I would like to introduce to you some European Commission FP7 and H2020 currently running projects in Policy Dialogue, renewable energy, also to show partner search system and opportunities of SMEs 2016-17 Calls, EC events in our country, etc.
- There are scientific programs which were quite popular several years ago and now due to various issues (mainly financial aspects and overall activity) are becoming less interesting for our scientists. They are: ISTC, STCU, NATO, GRDF/CRDF, etc.
- Only EC Framework programs, Erasmus Mundus, SNF and others maintained their actuality and interest.
- As you know in new H2020 program the interest of the Europe is to strengthen the EU's excellence and attractiveness in research and innovation as well as its economic and industrial competitiveness (creating thereby win-win situation); to solve global societal challenges (such as climate changes, infectious diseases, food security, etc.) and to support the EU external policies (ENPI, Science diplomacy, ERA, etc.)



The most important novelties of the Horizon 2020 program

Total cost of H2020 program is about 77 billion EUR.

- ❖ **EC will direct at least 20% of the H2020 budget to climate - related objectives**
- ❖ **EC will spend 15% of the budget for SMEs (in „Leadership in enabling and industrial technologies“ (LEIT) and „Societal Challenges“) for the support and increasing participation of SME’s in several H2020 programs.**
- ❖ **One of the main goal of the H2020 is to increase GDP on R&D up to 3% by 2020;**
- ❖ **To increase amount of European Technology Platforms (ETPs).**



EEC DG Connect event in Georgia

- **In September 2015, with the support of EC DG CONNECT, Information Day was organized in Georgia in ICT and Research Infrastructure.**
- **It should be underlined that all three meetings in Armenia (organized in 2013 by PICTURE project), Azerbaijan (organized in 2014) and Georgia (organized in 2015 by currently running EH&EECA2H projects) were conducted on high level. INFO DAYs attracted many experts from the EU and EaP and were very useful especially for targeted countries. It is important to notice that in Tbilisi INFO DAY participated wide spectrum of ICT specialists from EU countries (such as Spain, Ireland, Poland, Lithuania, Italy, France, Greece, etc.), ETP representatives, 22 EaP experts and 40 local experts.**



EEC DG Connect event in Georgia

- **During the Tbilisi event the video conference was organized (by local representatives) between Tbilisi State University (TSU) and Brussels (DG CONNECT). In this tele conference Mr. Vasiliss Kopanas and Morten Moller from Brussels introduced to the audience in Georgia the novelties in H2020 program, they highlighted the interest of Europe to explore the local digital markets in EaP countries and to make harmonization of these markets with European ones. At the same time they emphasized importance of involvement of organizations/companies from Georgia (and EaP countries) in H2020 forthcoming Calls.**
- **Apart from the meeting of specialists of ICT field, the workshop of Research & Innovation in e-Infrastructures was organised, in which there were discussed the following tasks: High bandwidth reliable communication networks and pan-European research network GEANT; Computing resources; Distributed computing GRID, High Performance Computing (HPC) and scientific Cloud; etc.**



Brokerage Events

- **In November 2013 IDEALIST project organized Brokerage Event in Vilnius.**
- **In October 2014 IDEALIST organized Brokerage Event in Florence (Italy).**
- **In October 2015, IDEALIST organized Brokerage Event in Lisbon (Portugal).**
- **In September 2016 will be organized by EC and Idealist project in Bratislava (Slovenia).**



Policy Dialogue between EU and EaP countries in ICT (EH & EECA2H projects)

- **EAST HORIZON** project is a support action in International Co-operation targeting EECA countries. **EAST HORIZON** comes as a bridge for two-way co-operation. **EH** inspired ideas and influence policies to help so the Dialogue between the EU and the EECA countries. Project leads to the best possible benefits for both sides and in parallel will support the organizations to prepare successful proposals for joint projects, the tangible result of a successful cooperation.
- The **EECA-2-HORIZON** aims to address the ever growing need to further support the dialogue on the EU-EECA cooperation in the field of ICT and reinforce cooperation between the research and industrial communities of the two regions in areas of mutual interest and added value.
- **EECA-2-HORIZON** established cooperation in ICT between EaP organizations and European Technology Platforms (such as NEM, NESSY, Photonics 21, etc.).



IDEALIST Project Partner Search Tool

One of the main goals for achieving the objectives of H2020 is Transnational Cooperation among NCPs.

- One of such example that we have of NCPs network in ICT is Idealist 2018 Project (www.ideal-ist.eu), in which NCPs from 35 countries are united and among them - ICARTI from Georgia.
- Idealist started in 1996 with NCPs from a few Member States and Associated Countries and by 2014 reached more than 48 NCPs from 31 different EU and non-EU countries. Idealist continues to attract NCPs from all four corners of the world.
- The objectives of Idealist project are to:
 - 1. Reinforce the ICT NCP network by promoting trans-national cooperation
 - 2. Identify and promote continuously well-tested good NCP practices
 - 3. Enhance and share NCP knowledge on ICT Research Objectives, including all the ICT-related topics in H2020
 - 4. Deliver trainings and twinning measures tailored to the specific needs of LEIT ICT NCPs
 - 5. Raise awareness about NCP services including the implementation of practical initiatives to benefit cross-border audiences including a quality checked Partner Search, pre-proposal and full proposal check services, etc.





- > [View Partner Searches](#)
- > [Launch a New Partner Search](#)
- > [Opportunity finder](#)
- > [Find your Representative](#)

Ideal-ist addresses ICT companies and research organizations worldwide wishing to find project partners for a participation in the Horizon 2020 program of the European Commission. Ideal-ist offers a unique and quality-labelled Partner Search and other services helping to ease participation in Horizon 2020. Learn more [About ideal-ist](#)

Open calls [View All](#)

- > H2020 – EU-JAPAN – 2014
Close date: 10/04/2014
- > H2020 – FoF – 2014/2015
Close date: 20/03/2014
- > H2020-EINFRA-2014/2015
Close date: 02/09/2014
- > H2020-ENERGY-EE-2014/2015
Close date: 05/06/2014
- > H2020-ENERGY-LCE-2014/2015
Close date: 07/05/2014

Recently Published Partner Searches

- > PS-IT-89787: SPAIN-TING: Spacetime-Inspired Computing
- > PS-ES-89283: Knowledge as a Service: exploring the Big Data paradigm towards knowledge generation for smart and advanced technological applications
- > PS-ES-89830: MDE-Health
- > PS-IT-89363: single chip safety microsensors

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In QA process

- > PS-IT-89228: (RAFT) Using the RFID technology against the freight thefts along the supply chain
- > PS-NO-89154: Inclusive-MT
- > PS-NO-89152: Inclusive-MT

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ICT Events

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- > Towards 2020: New Horizons for RTD and Innovation in the Western Balkan Region
- > AAL-Forum 2014

ICT News

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- > First competitive call for experiment proposals under the European Clearing House for Open Robotics Development (EChORD++) project





QA label Partner search

PS ID	Proposal Name	Publish date	Call	Objective	Country	Quality Label	Status
PS-IT-89787	SPAIN-TING: Spacetime-Inspired Computing	13/03/2014	H2020-FETOPEN-2014/2015	FETOPEN 1 – 2014/2015: FET-Open research projects	Italy		Open
PS-ES-89283	Knowledge as a Service: exploring the Big Data paradigm towards knowledge generation for smart and advanced technological applications	07/03/2014	H2020-ICT-2014	ICT 15- 2014: Big Data and Open Data Innovation and take-up	Spain		Open
PS-ES-89830	MDE-Health	06/03/2014	H2020-HEALTH-PHC-2014/2015	PHC 26 – 2014: Self-management of health and disease: citizen engagement and mHealth	Spain		Open
PS-IT-89363	single chip safety microsensors	06/03/2014	H2020-ICT-2014	ICT 2- 2014: Smart System Integration	Italy		Open
PS-IT-89725	Phrase-based Ontology Enabled Multilingual Natural Language Machine Translation	06/03/2014	H2020-ICT-2014	ICT 17- 2014: Cracking the language barrier	Italy		Open
PS-AM-89835	Enhancing the security and efficiency in cloud applications by Polynomials and White-box encryption (POLYBOX).	05/03/2014	H2020-ICT-2014	ICT 32- 2014: Cybersecurity, Trustworthy ICT	Armenia		Open
PS-SI-89391	CryptoCloud	05/03/2014	H2020-ICT-2014	ICT 7- 2014: Advanced Cloud Infrastructures and Services	Slovenia		Closed
PS-GR-89705	Intelligent Routing in real-time environment	28/02/2014	H2020-TRANSPORT-MG-2014/2015	MG.7.1-2014. Connectivity and information sharing for intelligent mobility	Greece		Open



SPAIN-TING: Spacetime-Inspired Computing



[Reply to partner search](#)

PROJECT OVERVIEW

PS ID: PS-IT-89787

Status: Open

Date of last Modification: 13/03/2014

Date of Publication: 13/03/2014

Call Identifier: H2020-FETOPEN-2014/2015

Objective: FETOPEN 1 – 2014/2015: FET-Open research projects

Funding Schemes: Research & Innovation Actions

Evaluation Scheme: One stage

Closure Date: 29/09/2015



Serching partners interested in multidisciplinary research on computational universe conjecture and emergent computational patterns in discrete models of spacetime

PROJECT DESCRIPTION

Proposal Outline:

Investigating the clever solutions invented by nature, in several billion years of evolution, for supporting life processes in the biosphere, is, today, a well consolidated practice in multi-disciplinary research areas such as bio-inspired computing, whose benefits in terms of technological innovation are already being delivered.

Project SPAIN-TING starts from the basic and highly controversial assumptions that (i) Nature is fundamentally computational, meaning that the complexity observed in the Universe is the manifestation of the emergent properties of pure information processing activities; and, more crucial, that (ii) computation occurs at all levels, down to the physical level of subatomic particles, and below. Not only 'life is evolving software' (as recently suggested by G. Chaitin), but spacetime itself, intended as the ultimate, discrete fabric of the cosmos, computes.

The conjecture of a discrete, network-based, algorithmic spacetime can be naturally placed in the context of established fundamental physics research (and quantum gravity), and dialogue with efforts in that area (e.g. with the Causal Set Program) is useful, but we expect contributions also from the fields of theoretical and evolutionary biology, of complex networks, and others. The most ambitious and visionary objective of this project is to open a path toward the identification, crucially by massive simulation, of some of the 'clever' computing solutions that may be hidden at the lowest scales (Planck, presumably) of the physical universe, in view of their technological exploitation in the form of spacetime-inspired computing.

PARTNER PROFILE SOUGHT

Required skills and Expertise:

We look for individual researchers, or groups, with the following skills:

- Discrete models of spacetime (Causal sets, Causal Dynamical Triangulations, Spin Networks, NKS), Physics of spacetime (Lorentz metrics and invariance, Minkowski and de Sitter space,...).

Complex network science (scale free, percolation, ...).

- Computer science. Simple models of computation (Turing machines, cellular automata, boolean networks, graph rewriting systems, ...). Genetic algorithms. Massive parallel systems. Simulation of agent-based systems.

- Dynamical systems, chaos theory, self-organisation and emergence.

- Theoretical and evolutionary biology, artificial life (Kauffman, ...).

- Computational universe conjecture (Zuse, Fredkin, Wolfram, Lloyd, ...).

Description of work to be carried out by the partner(s) sought:

Theoretical research on, and massive computer simulation of algorithmic discrete models of spacetime satisfying key physical requirements (e.g. Lorentz-invariance); identification of emergent information-processing solutions in view of their technological exploitation.

Type of partner(s) sought:

Universities, public research institutions, research departments of private companies.

Looking for a Coordinator for your proposal:

No

PROPOSER INFORMATION

Organisation: CNR Italian National Research Council

Department:
ISTI Istituto Scienza e Tecnologie Informazione

Type of Organisation: Research Center

Country: Italy



Reply to partner search

Expression of Interest Form

Express Your Interest: insert your comments and data

📄 Information on the PS

Comments

Your Comments to the **Required Skills and Expertise** : *

Highlight your skills and expertise proving inference to those requested in this Partner Search

Your Comments to the **Work to be carried out by the partner(s) sought** : *

Highlight your capacity and resources available in carrying out the work requested

Your Comments to **Type of partner(s) sought** : *

Highlight that your profile matches the type of partner sought

List here very shortly your experience of working on EU Programmes, National Programmes and Publications: *

My organisation participated in an IST/ICT Project before

My organisation coordinated an IST/ICT Project before

Your Data

First Name: *

Last Name: *

Organisation: *

Type of Organisation: *

Department: *

Fax Number:

Phone Number:

Web Address:

City: *

Country: *

Street:

Postal code:

Email: *

NoGAP Project

- **NoGAP aims at promoting cooperation of the EU and its Members States/Associated Countries with Eastern Partnership Countries (namely: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine) on bridging the gap between research and innovation. NoGAP contributed to taking advantage of the innovation potential of SMEs based on a better cooperation with researchers, transferring and using knowledge resulting from research.**
- **The overall objective of the project was to reinforce cooperation with Eastern Partnership countries to develop a Common Knowledge and Innovation Space” on the societal challenge Secure, Clean and Efficient Energy.**
- **The NoGAP consortium is composed of 13 organisations from 6 countries of which 3 are EU members (Germany, Romania, Slovakia) and 3 are members of the Eastern Partnership (Belarus, Ukraine, Georgia). In order to improve mobility between research, business and innovation, interrelated tandem relations between research organisations and innovation support services were established.**



Results of the NoGAP Project

- **Stakeholders list for EaP countries** was defined and classification was made of organizations working in energy sector such as: governmental, NGOs, companies, or service organizations working in the field of secure, clean and efficient energy. On the other side the field of activity of organizations was indicated (wind, solar, geothermal, bio, water, wood, gas, coal, oil, nuclear). Requisites, web sites, phones and other information was indicated in the selected list of the contact persons of selected organizations.
- Later **the networking list** of partner organizations was created in which we united more than 300 organizations from EaP countries and partly EU companies, related CSA energy projects, etc.
- More than 200 **TO, TR EoIs, company profiles** were selected;
- **6 Business plans** were prepared;
- **Twinning** and staff exchange between consortium partners were successfully conducted;
- Two **brokerage events** (in Kiev and in Frankfurt technology fair) were organized.



Results of the NoGAP Project

- **Handbook** for services in IPR and Innovation Management was published.
- **Project Handbook** - Knowledge Transfer Community to Bridge the Gap Between Research, Innovation and Business Creation was created.
- **Trainings** for SMEs/Start up entrepreneurs, training for researchers: Innovation and Knowledge Support and Training for multipliers were conducted.



Horizon 2020 dedicated SME Instrument 2016-2017

- SMEInst-01-2016-2017: Open Disruptive Innovation Scheme
- SMEInst-02-2016-2017: Accelerating the uptake of nanotechnologies advanced materials or advanced manufacturing and processing technologies by SMEs
- SMEInst-03-2016-2017: Dedicated support to biotechnology SMEs closing the gap from lab to market
- SMEInst-04-2016-2017: Engaging SMEs in space research and development
- SMEInst-05-2016-2017: Supporting innovative SMEs in the healthcare biotechnology sector
- SMEInst-06-2016-2017: Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well
- SMEInst-07-2016-2017: Stimulating the innovation potential of SMEs for sustainable and competitive agriculture, forestry, agri-food and bio-based sectors
- SMEInst-08-2016-2017: Supporting SMEs efforts for the development - deployment and market replication of innovative solutions for blue growth
- SMEInst-09-2016-2017: Stimulating the innovation potential of SMEs for a low carbon and efficient energy system
- SMEInst-10-2016-2017: Small business innovation research for Transport and Smart Cities Mobility
- SMEInst-11-2016-2017: Boosting the potential of small businesses in the areas of climate action, environment, resource efficiency and raw materials
- SMEInst-12-2016-2017: New business models for inclusive, innovative and reflective societies
- SMEInst-13-2016-2017: Engaging SMEs in security research and development



Horizon 2020 dedicated SME Instrument 2016-2017

- **INNOSUP-01-2016-2017: Cluster facilitated projects for new industrial value chains**
- **INNOSUP-02-2016: European SME innovation Associate - pilot**
- **INNOSUP-03-2017: Technology services to accelerate the uptake of advanced manufacturing technologies for clean production by manufacturing SMEs**
- **INNOSUP-04-2016: SMEs for social innovation – Challenge platform**
- **INNOSUP-05-2016-2017: Peer learning of innovation agencies**
- **INNOSUP-06-2016: Capacity-building for National Contact Points (NCPs) for SMEs and Access to Risk Finance under Horizon 2020**



Thank you for your attention!



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