# Newsletter



Policy dialogue in ICT to an Upper level for Reinforced EU-EECA Cooperation

#1 November 2012

EU-Eastern Europe and Central Asia Gateway for ICT Research, Development and Policy Dialogue



Svetlana Klessova. inno TSD, project coordinator

#### Dear readers.

The European Union (EU) and the Eastern European and Central Asian countries (EECA) share the common goal of achieving political, economic and social stability and prosperity. Science and Innovation are important components of the knowledge based economies, and ICT (Information and Communication Technologies) are considered as respective keys to success. Bilateral and multilateral cooperation in the field of ICT is moreover essential to make optimum use of academic strengths, to share respective resources and to prepare the ground for a joint transfer of scientific results into innovative applications for national and worldwide markets.

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Institute for informatics and automation problems of the national academy of sciences of the republic of Armenia

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#### From the editor



**Svetlana Klessova,** inno TSD, project coordinator

#### Dear readers,

The European Union (EU) and the Eastern European and Central Asian countries (EECA) share the common goal of achieving political, economic and social stability and prosperity. Science and Innovation are important components of the knowledge based economies, and ICT (Information and Communication Technologies) are considered as respective keys to success. Bilateral and multilateral cooperation in the field of ICT is moreover essential to make optimum use of academic strengths, to share respective resources and to prepare the ground for a joint transfer of scientific results into

innovative applications for national and worldwide markets.

Although the ICT cooperation between the EU and EECA partner countries is quite strong there is still much room for its further development. Acknowledging the current global challenges that both regions are facing, new perspectives for the strategic ICT partnership between the EU and the EECA countries should be developed, building on each others' strengths and on common research objectives.

EU-EECA policy dialogue in the sphere of ICT is considered as a key to achieve the goals of reinforcing EU-EECA collaboration and raising the full potential of real partnership.

I am pleased to present you PICTURE project - "Policy dialogue in ICT to an Upper level for Reinforced EU-EECA Cooperation" -, the 30 months FP7-ICT support action launched on 01/12/2011.

Aimed to foster collaboration opportunities and to support policy dialogue PICTURE is a logical continuation of the successful activities carried out under the **EECA ICT clustering**  projects - ISTOK-SOYUZ, SCUBE-ICT and EXTEND - that were running from January 2009 until June 2011 with the common mandate of strengthening the cooperation between EU and EECA countries in the field of Information and Communication Technologies (ICT).

The cluster experience clearly has shown the need to continue the efforts of the three clustering projects in the EECA countries, further amplifying their impact.

Therefore, the main objective of the PICTURE project is to exploit collaboration frameworks built on the foundations and achievements of three successful clustering projects to enrich and support the research dimension of the EU-EECA ICT Policy Dialogue. The PICTURE Consortium, with complementary skills and experiences in international cooperation and bilateral cooperation with EECA countries, engages the EU and EECA stakeholders from the government and academia, research institutions and enterprises, to bring the present collaboration in ICT research to a higher level.













PICTURE project covers an extensive geographical zone including all European Union's Member States and all 12 countries of the EECA region. The project's strength lies in incorporating organizations from all 12 EECA countries possessing deep knowledge of the current ICT collaboration needs and having wide expertise in complementary fields of activities.

### PICTURE FIRST findings and achievements ...

## PICTURE set up three working groups aiming at boosting the EU-EECA cooperation in ICT domain

It is well known that people and interaction between them are the key factors for scientific research, technological development and industrial applications progress. In order to strengthen the opportunities for interaction, the PICTURE team decided to create three interconnected Working Groups, matching selected domains for in-depth project focus.

- Working Group on Policy Dialogue (WG1): WG1 deals with different policy related topics, which can be different for different sub-groups of countries within the project consortium (e.g. launch of policy process, coordinated call, SICA etc). WG1 includes mainly consortium partners.
- Working Group on Components, Computing Systems, and Networks (WG2): WG2 covers such areas as new generation of components and systems, advanced computing, software and services for the future internet. WG2 consists of both consortium partners and external experts.
- Working Group on Content Technologies and Information Management (WG3): WG3 spreads its activities on digital libraries, technology enhanced learning, intelligent information management, and also on ICT for digital learning and creativity. WG3 consists of both consortium partners and external experts.

### The objectives of the Working Groups are as following:

- enhance project's findings and recommendations for EU-EECA ICT cooperation,
- contribute to the validation of a Roadmap for support to EU-EECA ICT policy dialogue,
- participate in the selection of pilot projects to be implemented under PICTURE project,
- increase the visibility of project activities and support the dissemination of project results.
- stimulate the discussion between the key relevant players both in Europe and in the EECA countries.

The working group members will be the **project ambassa-dors** by keeping informed their various networks of the project









outcomes, the project proactive observers by notifying any new initiatives and the project inner reviewers by providing feedbacks, advices and ideas

notably concerning the case studies and project results. The first meeting of all Working Groups and the Validation Workshop of the PICTURE project will be organised in Moscow, Russian Federation, on November 29th, 2012. Two other meetings are expected during the project life-cycle.

#### Members of the Working Group "Policy dialogue"

AZERBAIJAN	Tofig Babayev	Director, Regional Innovative Technologies Academy				
ARMENIA	Levon Aslanyan	Head of Department, Institute for Informatics and Automation Problems				
BELARUS	Tatyana Lyadnova	Head of Department, Institute of System Analysis and Information Support of Scientific and Technical Sphere, State Committee on Science and Technology				
GEORGIA	Givi Kochoradze	Executive Director , International Center for Advancement of Research, Technology & Innovation				
KAZAKHSTAN	Timur Shalabayev	Expert, National Agency for Technological Development JSC				
KYRGYZSTAN	Anara Satylkanova	Director, EIMO				
KYRGYZSTAN	Kunduz Rysbek	Expert, EIMO				
MOLDOVA	Igor Cojocaru	Director, Information Society Development Institute				
MOLDOVA	Ion Cosuleanu	Consultant, Project Implementation Unit of the World Bank Competitiveness Enhancement Project/ EPPO Ministry of Environment				
RUSSIA	Marat Biktimirov	Director-General, The National Association of Research and Educational e-Infrastructures (e-ARENA)				
TAJIKISTAN	Ilkhom Mirsaidov	Manager , SODESCO				
TURKMENISTAN	Nazar Korpeyev	Chairman, Tebigy Kuwwat, NGO Social Unit Enterprise "Tebigy Kuwwat" ("Natural Energy")				
TURKMENISTAN	Serdar Mamednyyazov	Head of Laboratory, Institute GÜN of the Academy of Sciences of Turkmenistan				
UKRAINE	Ivan Kulchytskyy	President, Non-Governmental Organization "Agency of European Innovations"				

#### Members of the Working Group "Components, computing systems and networks"

AZERBAIJAN	A.Bayramov	Leader of Group, Physics of Polimer Nano - and Active Composites Laboratory, Institute of Physics, Azerbaijan National Academy of Sciences		
ARMENIA	Grigori Saghyan	BoD Member, ARMINCO Ltd.		
ARMENIA	Levon Aslanyan	Head of Department, Institute for Informatics and Automation Problems		
BELARUS	Vassili Kovalev	Head of Department of Biomedical Image Analysis, United Institute of Informatics Problems, Belarus National Academy of Sciences		
RUSSIA	Igor Alekseev	Director, University Internet Center, Yaroslavl State University		
RUSSIA	Lev Shchur	Vice-Chairman and Chief Science Secretary, RAS Science Centre in Chernogolovka		
RUSSIA	Vladimir Voevodin	Deputy Director for Research, Research Computing Center, Lomonosov Moscow State University		
UZBEKISTAN	Marat Rakhmatullaev	Tashkent University of Information Technology		
UZBEKISTAN	Fatima Adilova	Head of Laboratory, Institute of Mathematics, National University of Uzbekistan		
UKRAINE	Sergii Stirenko	Director, HPC Centre, National Technical University of Ukraine		









#### Members of the Working Group "Content technologies and information management"

AZERBAIJAN	Elkhan Sabziyev	President, Kiber Ltd.			
ARMENIA	Hasmik Sahakyan	Scientific Secretary, Institute for Informatics and Automation Problems			
BELARUS	Serguei Filatov	Head of Laboratory on Synthesis and Analysis of Micro- and Nanoscale Materials, Head of nanostuctured materials certification Center, Deputy Head of Micro - and Nanoscale Mechanics and Heat Transfer Division, A.V. LuikovHeat and Mass Transfer Institute of National Academy of Sciences			
BELARUS	Sergei Levchenko	Leading Researcher, Laboratory of Systems Analysis, A.V. Luikov Heat and Mass Transfer Institute, National Academy of Sciences of Belarus			
GEORGIA	Ramaz Kvatadze	Executive Director, Georgian Research and Educational Networking Association (GRENA)			
GEORGIA	Nino Tsulaia	Head, Regional Cisco Networking Academy, GRENA			
GEORGIA	Givi Kochoradze	Executive Director, International Center for Advancement of Research, Technology & Innovation			
MOLDOVA	Ion Bolun	Dean, Faculty of Cybernetics, Statistics and Informatics, Academy of Economic Studies of Moldova			
TAJIKISTAN	Ilkhom Mirsaidov	Manager, SODESCO			
TAJIKISTAN	Mirzo Akramov	IT Specialist, SODESCO			
TURKMENISTAN	Ata Annamamedov	Consultant, Web designer, Academy of Sciences of Turkmenistan, Independent IT Consultant			
TURKMENISTAN	Ruben Yegoshin	Leading expert, IT Department, Academy of Sciences of Turkmenistan			
UKRAINE	Yevgeniya Sulema	Deputy Dean, Faculty of Applied Mathematics, Computer System Software Department, National Technical University of Ukraine "Kyi Polytechnic Institute"			
UKRAINE	Ivan Kulchytskyy	President, Non-Governmental Organization "Agency of European Innovations"			
UKRAINE	Andrii Melashchenko	Researcher, Department of Automation of Programming , V.M. Glushkov, Institute of Cybernetic, NAS of Ukraine			

## Consortium completed the update of the ICT priorities in 12 EECA countries

http://www.eeca-ict.eu/uploads/new\_documents/D2.1\_Updated\_report\_about\_the\_EECA\_ICT\_priorities\_Final.pdf

On the base of recommendations about ICT priorities for cooperation between the EU and the EECA countries that were prepared earlier by three cluster projects SCUBE-ICT, ISTOK-SOYUZ and EXTEND, a report on updated ICT R&D priorities in the EECA countries was prepared, taking into account the information about latest changes in ICT sector in partners' countries.

Project partners reviewed strategic documents that are related to ICT domain of their countries as well as contacted the key stakeholders in order to determine the list of ICT priorities. Moreover, with the aim to receive better results consultations with interested actors were con-

ducted and new national documents were analyzed.

The National ICT Priorities of all countries which representatives are members of the PICTURE consortium are presented within a document. These are Russia, Eastern Partnership (EaP) countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine) and Central Asia (CA) countries (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan). These priorities reflect the main ICT R&D topics, in which these countries possess high scientific-technical potential. ICT R&D areas recommended for cooperation with European organizations are specified separately.









#### LIST of R&D areas with high collaboration potential per country

0				
Country				
Russia	<ol> <li>Advanced Software Engineering</li> <li>Embedded Systems, Robotics, Intelligent Systems</li> <li>GRID and Cloud Computing, High-performance computing</li> <li>Network of the Future</li> <li>Nanoelectornics and Photonics</li> <li>Digital Libraries</li> <li>ICT for Health</li> <li>Security, Trustworthy IT</li> </ol>			
EaP Countries	List of R&D areas where the country has highest potential for cooperation			
Armenia	<ol> <li>Internet of services, Future Internet, Future Networks</li> <li>Computing systems</li> <li>Intelligent information management, Security, Trustworthy ICT</li> <li>Technology-enhanced learning</li> <li>Components, Systems, Engineering</li> <li>Digital libraries and digital preservation</li> <li>Organic photonics and other disruptive photonics technologies</li> <li>e-Health</li> </ol>			
Azerbaijan	<ol> <li>Cloud Computing, Internet of Services and Advanced Software Engineering</li> <li>Cognitive Systems and Robotics</li> <li>Nanoelectornics Technology</li> <li>Computing Systems</li> <li>Digital Libraries and Digital Preservation</li> <li>Intelligent Information Management</li> <li>e-Health</li> <li>ICT Solutions for governance and policy modelling</li> <li>ICT systems for Energy Efficiency</li> </ol>			
Belarus	<ol> <li>GRID and Cloud Computing, High-performance computing, Supercomputing</li> <li>Digital Libraries and Digital Preservation</li> <li>Nanoelectornics Technology, Microelectronics, Components</li> <li>Photonics</li> <li>Internet of Services, Future Internet</li> <li>e- Health</li> <li>ICT for Governance and Policy Modelling, Intelligent Information Management</li> <li>Geo-Spatial Technologies</li> </ol>			
Georgia	<ol> <li>ICT for energy efficiency</li> <li>Technology-Enhanced Learning</li> <li>Personal Health Systems</li> <li>Nanoelectronics Technology</li> <li>Internet of Services, Software &amp; virtualization</li> <li>Intelligent Information management</li> <li>Photonics</li> </ol>			
Moldova	<ol> <li>Computing Systems</li> <li>Internet of Services, Software &amp; Virtualization</li> <li>Digital libraries and digital preservation</li> <li>Technology-Enhanced Learning</li> <li>Intelligent information management</li> <li>Nanoelectronics Technology</li> <li>ICT for Patient Safety</li> </ol>			
Ukraine	<ol> <li>GRID and Cloud Computing, High-performance computing, Supercomputing</li> <li>Electronic governance (e-governance), Intelligent Information Management</li> <li>Internet of Services, Future Internet, Future Networks</li> <li>Microelectronics, Microsystems and smart miniaturised systems</li> <li>Cognitive Systems and Robotics</li> <li>Technology-Enhanced Learning</li> <li>Digital Libraries and Content</li> <li>Electronic Health (e-Health)</li> </ol>			





CA Countries	List of R&D areas where the country has highest potential for cooperation		
Kazakhstan	<ol> <li>Networking and Services</li> <li>Personal Health System</li> <li>Governance and Participation Toolbox</li> <li>Digital Libraries and Digital Preservation</li> <li>Telecommunication</li> <li>E-learning</li> <li>Supercomputing</li> </ol>		
Kyrgyzstan	<ol> <li>E-government</li> <li>Digital services: health, governance, etc.</li> <li>E-learning</li> </ol>		
Tajikistan	<ol> <li>E-services: health, governance, "one stop shop" etc.</li> <li>GIS and GPS applications</li> <li>Telemedicine</li> <li>Remote control and management</li> </ol>		
Turkmenistan	<ol> <li>Control and automation for energy/gas production companies</li> <li>E-services: health, governance, "one stop shop" etc.</li> </ol>		
Uzbekistan	<ol> <li>Control and automation for energy/gas production companies</li> <li>E-services: health, governance, "one stop shop" etc.</li> <li>GIS and GPS applications</li> <li>Telemedicine</li> <li>Digital Libraries and Digital Preservation</li> <li>Remote control and management</li> </ol>		

## Recommended ICT Research topics for the EECA-EU collaboration in SICA Calls

Another task within the PIC-TURE project was to develop a limited number of topics for Specific International Cooperation Actions (SICA Calls) – special collaborative research projects for promoting cooperation with a focus region or strategic partner country. When proposing a topic for SICA Call, each EECA partner took into account:

- its relevance to and importance for the major socioeconomic challenges,
- the competitiveness of appropriate industries,
- the need in interoperable solutions and unified standards,
- the level of national expertise, and also the number of researchers within the area.

The selected topics are relevant to the main challenges of

the WP2013 which are directed towards developing the basic ICT technologies and infrastructure sand increasing the ICT contribution to addressing the major socio-economic challenges. At the same time, they have a potential to stay urgent in the coiming "Horison-2020" Programme.

As a result of implemented selection, the two separate lists of topics have been developed for each of sub-regions – Eastern Partnership (EaP) and Central Asia (CA) countries.

#### ICT topics for EaP-EU SICA projects (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine)

The proposed topics reflect the main ICT priorities specified in the national R&D programmes of the EaP countries. They are also directed at the develop-

ing of the ICT solutions that respond to the major societal challenges of the region. These challenges are broadly in line with those identified in the EU 27 countries. The EaP countries possess high-level expertise as well as a critical mass of high-level researchers within each proposed theme.

### • Topic 1: GRID and Cloud Computing

EaP countries are actively developing their own Grid infrastructures, and close collaboration and interaction with the European Grid Infrastructure is foreseen. Furthermore, the computing infrastructure for the Large Hadron Collider building actively promotes such collaboration. It is reasonable therefore to envis-







age developing interoperable solutions and standards as well as pilot actions for cooperation around the topic of advanced programming techniques for supercomputing. Some countries are members of EGI, most EaP countries are connected to the Pan-European GĂANT network and are willing to develop further this cooperation with EU.

## • Topic 2: ICT for e-learning and digital information services

Universities, research institutes, libraries and cultural centres could be involved in activities on information digitizing as well as new technologies for digital information access development. The development of such sub-priorities as digital libraries, e-services for access to cultural heritage and technology enhanced learning, such as E-learning resources are amongst the most important priorities.

## Topic 3: Nanoelectronics Technology, Microelectronics Components

The EaP countries possess a high level expertise in this topic and a critical mass of high-level researchers. Common scientific programmes are being implemented within the EECA countries cooperation activities, and some shared infrastructure has been developed. The new generation of components and systems development is also of great importance nowadays.

#### • Topic 4: Electronic governance (e-governance), including Intelligent information management

EaP countries are planning to create new services for home and international citizens (as well as for business, simplifying regulatory procedures) with the help of new ICT solutions. The joint development of agreed solutions is an important task.

### • Topic 5: Advanced technology for e-Health

This topic is one of the most significant societal challenges in EaP countries, as well as in the EU. It is important to develop interoperable solutions and standards within this field as well as to foster technical solutions implementation in EaP countries that would be in line with the best European practices.

#### ICT topics for CA-EU SICA projects (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan)

The ICT topics recommended for cooperation with the CA countries closely reflect the national trends on infrastructure development. Previous reports and analysis have highlighted the presence of qualified R&D teams in the region. However, they are mostly orientated towards implementation of imported products, local applications and infrastructure development. The recommended research topics for SICAs are therefore focused and related to test-beds and trials opportunities rather than to launching leading edge research and providing support for frontier ideas.

#### **Identified Priority topics:**

#### Topic 1: Advanced Networking (relevant to Objective ICT-2013.1.1 Future Networks of WP ICT 2013)

Communication infrastructure and services are developing very rapidly in Central Asia countries. The development of cooperation with EU countries will result in a decrease in the technology gap with the CA-countries and an increasing level of their own R&D activities. It is reasonable to envisage the

Grid and Cloud computing as pilot actions for the training of local researchers & engineers, with the aim to develop shared regulations and use of interoperable standards in EU and CA countries.

#### Topic 2: ICT for e-governance, e-learning and digital information services

Providing citizens and industries with an access to information via new technologies is recognised as a key tool of social-economic development in CA countries. As for now, an active integration of new digital services is taking place. The development of such sub-priorities as corporate systems and networks supporting digital libraries, eservices for access to cultural heritage and scientific and educational knowledge are among the most important. These services can be developed for cultural heritage preservation, digital libraries and education projects. Many R&D organizations of CA-countries area already adapting current technologies and have started developing their own applica-

#### • Topic 3: ICT for healthcare delivery, including telemedicine and interoperability of patient summary between EU and CAcountries (relevant to Objective ICT-2013.5.1 Personalized health, active ageing, and independent living of WP ICT 2013)

This topic is one of the most significant societal challenges in CA countries, as well as in the EU. It is important to develop interoperable solutions and standards within this theme as well as to foster technical solutions' implementation in CA countries that would be in line with the best European practices.









### • Topic 4: Process automation in resources management trials

(note: this is not considered a "priority R&D topic" in Central Asia for the moment, but this is the topic that corresponds to the local needs/demand; the relevant technologies are currently acquired abroad)

CA countries concentrate on the engineering of new infrastructures and development of locally tailored applications. As such they are eager to incorporate new R&D advances in their deployments and as such offer testbeds and trial en-

vironments, especially in the fields of resource management (energy, water).

http://www.eeca-ict.eu/up-loads/new\_documents/D2.1\_ Updated\_report\_about\_the\_ EECA\_ICT\_priorities\_Final.pdf

## Overview of existing activities relevant to the ICT policy dialogue in the EECA countries

PICTURE project, in its attempt to enrich and support the ICT policy dialogue between the EU and EECA countries, decided to explore and analyze the existing activities (relevant to ICT policy dialogue) between the two regions. The analysis and evaluation of these activities will serve as a base for recommendations on the improvement of the ICT policy dialogue between EU and EECA. All the above, enriched with specific information provided by every EECA country, are currently compiled in an aggregate report "Overview of existing activities relevant to ICT policy dialogue in the EECA countries" that has been published

(http://www.eeca-ict.eu/uploads/new\_documents/D2.2\_overview\_of\_existing\_activities\_relevant\_to\_ICT\_policy\_dialogue\_in\_the\_EECA\_countries.pdf)

http://www.eeca-ict.eu/news/Overview\_of\_existing\_activities\_relevant\_to\_ICT%20policy%20dialogue%20in%20the%20EECA%20countries

The report serves as important informational source for some of the next project's activities, namely:

- preparing an ICT collaboration Roadmap for the further project initiatives,
- proposing pilot projects that will support the policy dialogue between EU and EECA countries.

All the above will be submitted to the Validation and Dissemination Workshop which will be held in Moscow from 28 to 30 November, 2012. As an output of the Validation and Dissemination Workshop, the final version of the roadmap will be prepared. The roadmap will include concrete proposals for policy dialogue support activities, and recommendations for the concrete pilot projects to be implemented.

### **Success story:**

#### "DIGITAL MOLDOVA 2020" GOES FORWARD WITH PICTURE'S SUPPORT



Moldova has gained a positive experience in ICT area starting mainly since 2005, when the Government of the Republic of Moldova had approved the National Strategy on Building Information Society – "e-Moldova" and the Action Plan for its

implementation. The concept of Electronic Government was approved by the Government in June 2006.

Based on the importance of the successful implementation of the above mentioned strategic documents for Mol-







dovan society as a whole and for academia in particular, in 2008 the Academy of Sciences of Moldova jointly with the Ministry of Information Development (currently Ministry of Information Technology and Communications - MITC) founded the Information Society Development Institute (ISDI) (http://idsi.md/en/home).

IDSI is a research institute. It is ISO 9001 and ISO 14001 certified. The ultimate goal of ISDI is to become an excellence institute, providing support through research and applications and acting as a cross-point for national and international organizations in area of information and knowledge society.

Emphasizing the significance of the ICT sector in national

economy, as well as the major role of new technologies in society, the MITC has initiated the development of a new national strategy in the area. In April 2012 were launched the public consultations on the next national strategy in ICT area entitled "Digital Moldova 2020". The national strategy in ICT is based on the priorities and objectives established by the Digital Agenda for Europe. The Digital Agenda for Europe, as a strategic document of the European Union became a good example of a large vision and concrete objectives in the ICT field, not only for members of the European Union, but for the whole Europe.

The development of the strategy "Digital Moldova 2020"

is based on working groups created by the MITC, which include representatives of the national public authorities, civil society, business sector and academia. The Academy of Sciences is represented by three members, of which: Mr. Igor Cojocaru - director of the Information Society Development Institute, Ms. Anastasia Stefanita – researcher at the same institute. Being widely experienced in the policy making process in ICT field, Mr. Igor Cojocaru and Ms. Anastasia Stefanita are actively involved in PICTURE activities, too. This can be considered as a success story for academia from Moldova in general, due to involvement in the decision making process as well as active participation in the PICTURE project.

### Introducing project's partners:

## INSTITUTE FOR INFORMATICS AND AUTOMATION PROBLEMS OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF ARMENIA



The Institute for Informatics and Automation Problems (IIAP) is the leading research and technology development institute of the National Academy of Sciences of the Republic of Armenia (NAS RA) in the sphere of applied mathematics and informatics, as well as in application domain of computing technologies in various fields of science and technologies.

Since the foundation in 1957 (initially it was Computer Centre of Academy of Sciences and Yerevan State University), IIAP has played a remarkable role in Armenia disseminating the culture of computing, automation and services. Computer Science and applied mathematics remain the main scientific directions of IIAP. Investigations in area started in early 50s, when Soviet Armenia has been a hub of mainframe and industrial computing.

At present the theoretical researches in IIAP include mathematical logic, theory of algorithms, theory of automata, algebraic coding theory, artificial intellect and cognitive

models, discrete mathematics, graph theory, image processing, information theory and statistics, numerical methods.

Since the independence in 1991 the ICT industry in Armenia switched its focus to the science embedded software development, outsourcing and IT services. Currently, IIAP takes the leading position in the region in the field of ICT. IIAP designed and created the Academic Scientific Research Computer Network (ASNET-AM) of Armenia and now it is responsible for developing and managing that infrastructure. Currently ASNET-AM consists of communication nodes in 5 districts of Armenia, which are interconnected by

**AAHOMEAA** 







fiber-optics and wireless links. Scientists, scientific and technical associates, postgraduates, students from more than 50 organizations currently constitute the ASNET-AM network.

Starting from 1997 the biennial "Computer Science and Information Technologies" international conferences are organized by IIAP. Since 1963 IIAP has published "Mathematical Problems of Computer Science", transactions of scientific

researches. So far 38 volumes have been published. IIAP cooperates actively with scientists from different countries within the framework of scientific projects supported by EU FP, UNDP, CRDF, ISTC, NATO and other funds.

In 2000 the growing importance of IT industry led the Government of Armenia to declare ICT as one of the priority sectors of economy. Other key initiatives include the preparation of

Armenia's ICT Master Strategy and formation of Information Technologies Development Support Council at the Prime Minister. In this regard IIAP has become the leading force in ambitious State programmes of developing Information Society and Information Industry in Armenia.

IIAP will host in September 2013 the PICTURE workshop on Components, Computing systems and Networks.



#### **PICTURE NEWS**

## PICTURE SELECTED "PROJECT OF THE MONTH"

PICTURE was selected in July 2012 as the Project of the Month by IncrEAST - Information Exchange in Science and Technology between the European Research Area and Eastern Europe/Central Asia/ South Caucasus.

#### incrEAST is an information platform designed to:

- help intensify international cooperation in science and technology between the European Union and the countries of Eastern Europe, Central Asia and South Caucasus,
- facilitate the networking of research organisations, policy stakeholders and individuals from these regions, and
- promote scientific and research policy dialogue between countries of the target regions and EU Member States.

#### incrEAST provides:

- detailed and up-to-date information about the political development of research and technology in Eastern Europe, Central Asia and South Caucasus,
- information about collaborative projects, programmes and partner organisations, as well as about potential Host Institutions in Eastern Europe, Central Asia and South Caucasus for EU researchers, and
- contact information for local experts.

For further information: http://www.increast.eu/











#### PICTURE PRESENTED AT THE ICT PROPOSERS' DAY 2012, IN POLAND



The ICT Proposers' Day took place in Warsaw, Poland on 26 and 27 September 2012. Building on the success of the previous ICT Proposers Days, the event was organized by the DG Communications Networks, Content and Technology (DG CONNECT), in cooperation with the Polish Ministry of Science and Higher Education and the Polish National Contact Point.

The Warsaw event brought together 1500 participants from Europe and other countries and offered a good opportunity to present and discuss in direct the project ideas.

The event included the following activities:

#### ■ Networking

- Networking sessions, organised according to the Challenges and Objectives of the ICT Work Programme 2013 where potential proposers present their project ideas
- Stands/villages, organized per Challenge and Objective, which serve as meeting points for people interested in the same research topics

 Informal networking and bilateral pre-arranged meetings between participants

#### Providing information

- Information sessions on how to prepare and submit a proposal
- Objective stands where European Commission officials provide up-to-date information on the research Challenges and Objectives of the ICT Work Programme 2013 and the content of the calls for proposals
- An EC ICT information desk and a document library to supply information on relevant topics

The ICT Proposer Day offered an excellent networking platform to build quality partnerships for participating in the new ICT Work Programme for 2013 (around 1.5 billion of EU funding). Presentation of project ideas, first-hand information from European Commission officials, guidance on how to submit a successful proposal and much more was provided during the event.

The information about the ICT Proposer Day can be found on: http://ec.europa.eu/information\_society/events/ictproposersday/2012/index\_en.htm

The on-line networking platform, available on the event's website, allowed participants to log on to the website, to create their profiles, to submit or browse presentations, to find out about project ideas and start networking with other proposers.

http://ec.europa.eu/information\_society/events/ictproposersday/2012/networking/index\_en.htm

The Online networking remains open after the event. It provides access to numerous presentations from EC officials and presentations given during a networking session, and to the profiles of possible partners interested to join a project and offering their expertise, project ideas etc.

Regarding the ICT international cooperation between Eastern Europe and Central Asia the event highlighted that the overall goal is to support dialogues between the European Commission/the EU and











EECA countries, and to foster cooperation with EECA research organisations in collaborative ICT R&D both within the EU's Framework Programmes (FP7, Horizon 2020) and under relevant EECA country programmes. Activities under international cooperation objective should be covered in balanced partnership with

relevant and highly qualified EECA countries organisations, including in particular governmental actors (third country research ministries/agencies), relevant industry associations, and academic partners (research centres/universities).

PICTURE consortium organized a consortium meeting at the

ICT Proposer Day to discuss project advancement. PIC-TURE partners also used the opportunity to present the ICT competences of their respective countries to European organizations and brought back to home new ideas to build quality partnerships for participating in the ICT Work Programme for 2013.

#### PICTURE VALIDATION AND DISSEMINATION WORKSHOP, MOSCOW, 29 NOVEMBER, 2012



A Validation and Dissemination Workshop will bring together all consortium partners and working groups members in order to discuss the Draft Roadmap on EU-EECA ICT cooperation and proposals for pilot projects as well as the other findings and achievements of the first project period.

For this purpose the event will be attended by each consortium partner, the EC representatives, EECA ICT stakeholders, including policy makers, high-level specialists, top researchers and leading industrial companies' representatives.

As an output of the Validation and Dissemination Workshop organized, the Final version of the Roadmap for the project support to EU-EECA ICT policy dialogue will be prepared. The Roadmap will include concrete proposals for the Policy dialogue support activities, and recommendations for the concrete pilot projects to be implemented.

The recommendations will be targeted to the European Commission and will clarify how to better initiate activities with the EECA region in the field of ICT. Possibility of national co-funding for the pilot projects will be explored.

#### Contact point:

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#### WE NEED YOUR FEEDBACK

The PICTURE team will provide you with expert advice and professional consultancy, tailored to your needs.

In return, we would like to hear your feedback about your experiences collaborating in EU-EECA join ICT projects.







Do you have any other experience to share?

A seminar or conference to promote?

Suggestions for EU-EECA pilot projects?

Partners to be searched?

Send us your ideas and suggestions.

#### List of consortium partners per country:

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