



The PICTURE project, ICT R&I priorities in EaP, areas of cooperation

With the EU PICTURE project participants

Yerevan, September 26, 2013



THEME 1 : PICTURE PROJECT

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Policy dialogue in ICT to an upper level for reinforced EU-EECA cooperation

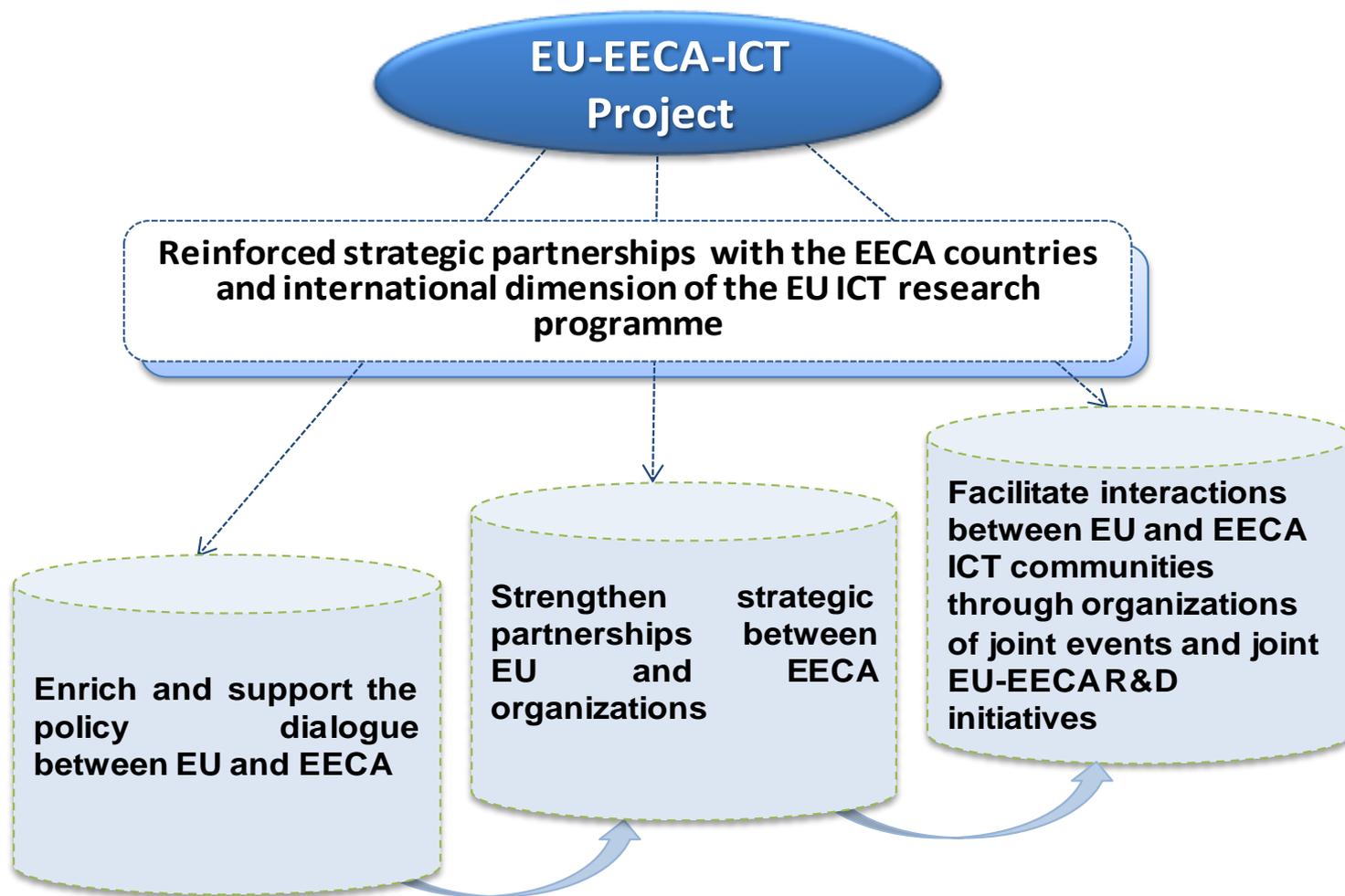
Consortium



- FP7 project, EC-funded
- International cooperation support action
- Start: 01/12/2011
- Duration: 30 months
- Target groups: National ICT stakeholders, ICT R&D organisations and companies,
- Target countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan

The **overall aim** of the PICTURE project is to engage the EU and EECA stakeholders from across research, academia, industries, government and civil society to enrich and **support the EU-EECA ICT Policy Dialogue**, and to reinforce **strategic partnerships** between EU and EECA ICT organizations

Project objectives



Picture thematic working groups

SUPPORT TO POLICY DIALOGUE



Total experts number: 33

Working groups -WG



Policy dialogue



Components, computing systems & networks



Content technologies & information management

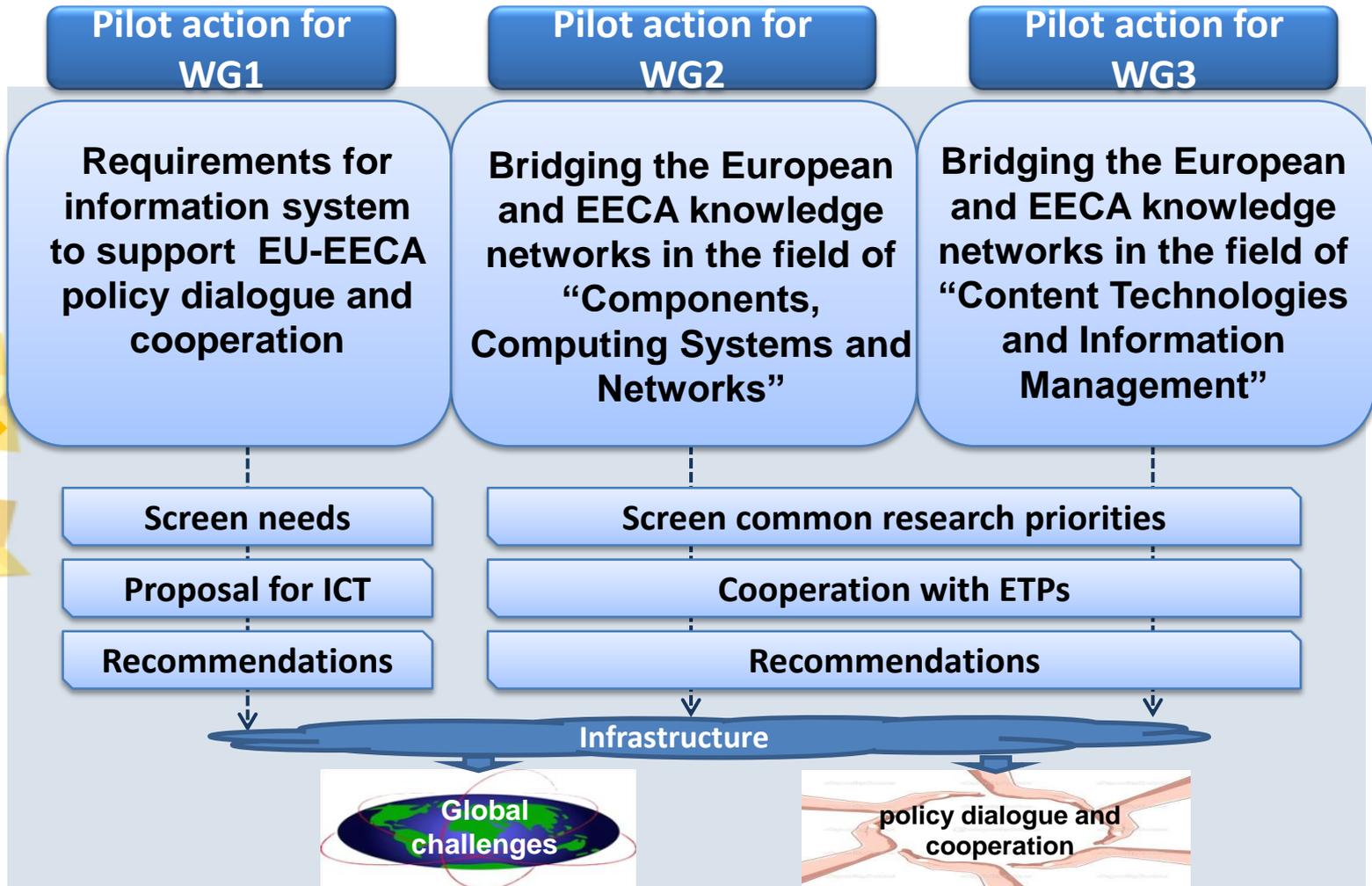
consortium partners
+ 3 external experts

2 consortium
partners +
8 external experts

5 consortium
partners + 10
external experts

Pilot actions

STRENGTHENING OF THE COOPERATIVE RESEARCH LINKS



Key Intermediate results

Support to policy dialogue

- Three working groups created
- ICT priorities in EECA countries updated

ICT stakeholders networking, events and synergy

- 2 Workshops of the POLICY DIALOGUE Working group
- 2 Workshops of the Content technologies and information management Working group + 1 Workshop of the Components, computing systems, and networks Working group
- Info-day co-organisation, Kiev, May 2013
- Info-day co-organisation, Yerevan, September 2013

Strengthening of cooperative research links

- Roadmap for the ICT EU-EECA collaboration published
- Three pilot actions are in active implementation
- Outcomes in the EECA countries (emerging collaboration with European Technology Platforms...)

Next steps

Support to policy dialogue

- Exchange with three thematic working groups members on STRENGTHENING OF THE COOPERATION EU-EECA RESEARCH LINKS

ICT stakeholders networking, events and synergy

- Workshop of the WG2 (yesterday)

Strengthening of cooperative research links

- Implementation of pilot actions in cooperation with ETPs
- Networking and brokerage session ICT 2013 in Vilnius

How can we help ICT specialists ?

Activities/Tools

Networking and Brokerage events

EECA ICT newsletter

EU and EECA ICT events

3 WGs groups

Integration to European Networks

EECA ICT Competence Platform

ICT Specialists

Participate (next: Erevan and Vilnius !)

Publish your success story

Learn about the most relevant ICT EU and EECA events (on the website)

Make suggestions to the members

Use our support / coaching

Consult profiles of 2500 ICT EU and EECA experts/ research centers (become one of us!)

Complementary to NCPs!

TO BE CONNECTED WITH PICTURE

<http://www.eeca-ict.eu>

- ❖ Learn about Project!
- ❖ Ask for assistance!
- ❖ Follow our progresses
- ❖ Find a partner!
- ❖ Info-day slides published



THEME 2 :

ICT R&I priorities in EaP countries and areas of cooperation

Speakers

Tatyana Lyadnova and

Givi Kochoradze

EU-EECA R&D collaboration. Background

EECA ICT Clustering projects

Different consultancy tools:

- ✓ competence platform
- ✓ cooperation potential studies
- ✓ documents analysis

<http://www.eeca-ict.eu/>

Consultations:

- ✓ with different stakeholders
- ✓ workshops
- ✓ panel discussions

- Consultation Workshops on ICT priorities – in each EaP country (2010)
- Interviews with high-level ICT experts
- Joint panel discussion – Final Conference EECA ICT Cluster (2011)

EU-EECA R&D collaboration. Further development by PICTURE project

PICTURE team continues the efforts of the three clustering projects, bringing ICT collaboration between EU and EECA at the upper level.

Common EECA ICT Priorities were updated (2012):

• Actions of project partners:

- conducted consultations with key ICT actors
- national authorities
- analyzed new national strategic documents



- specified ICT priorities for most countries
- added new ICT priorities correlated with current trends in EU, in the world

• Selection criteria of priorities by project partners:

- →(1) country high level expertise in this topic, critical mass of top level researchers;
- →(2) importance to address these topics for the EECA countries' economic and social developments, help EECA countries to face major socio-economic challenges;
- →(3) supporting the competitiveness of industry, to ensure leveraging by the EU budget of private spending;
- →(4) development of interoperable solutions and standards

The National ICT R&D Priorities in EaP

"Updated report about the EECA ICT priorities" developed

http://www.eeca-ict.eu/useful_information&active

Each EaP country presented:

- The basis on which the update of national ICT R&D priorities has been done
- General information about the ICT sector in the country
- List of national ICT R&D priorities
- ICT competences as extracted from the EU-EECA ICT competence platform
- ICT R&D areas recommended for cooperation with the EU

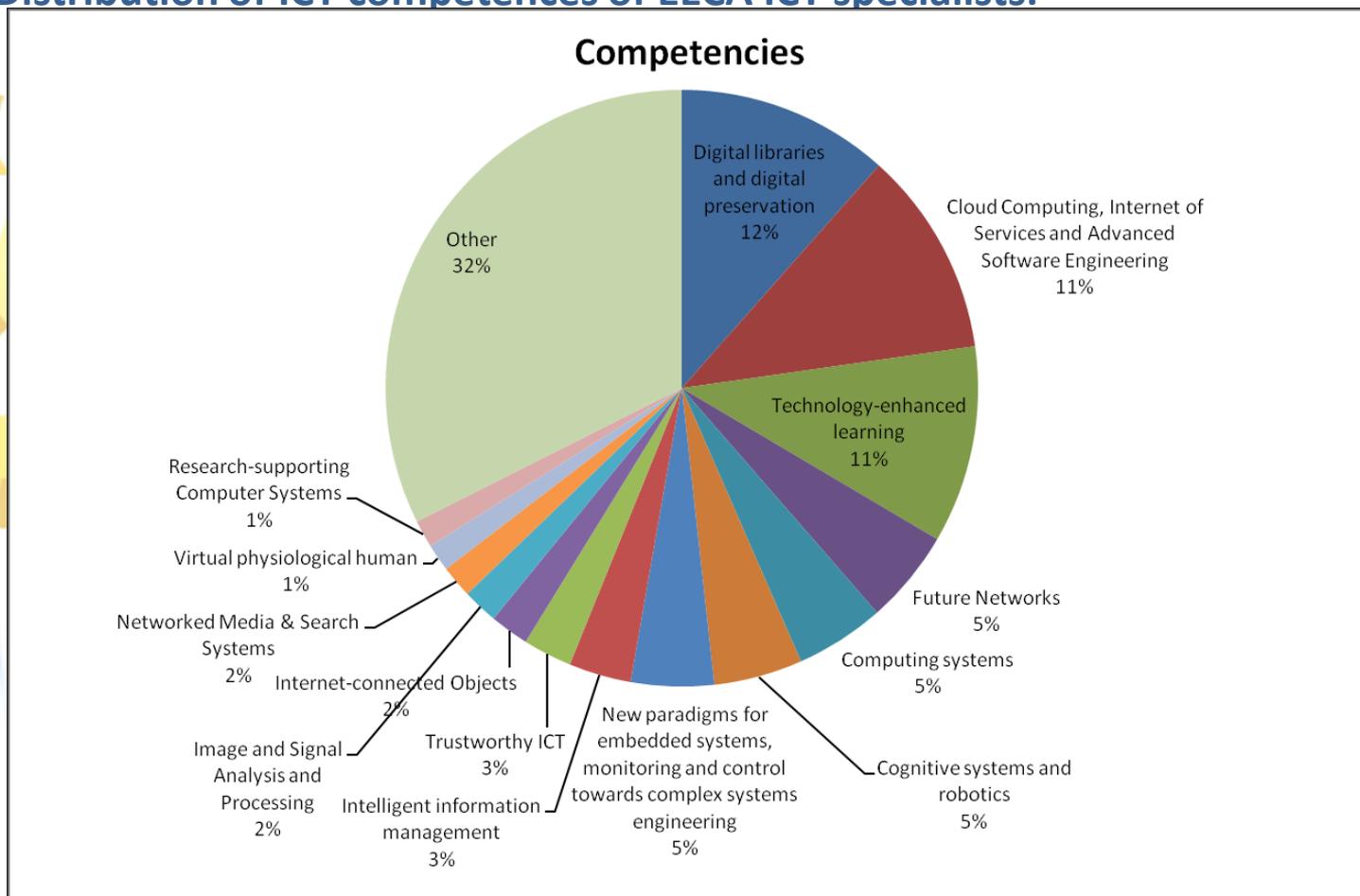
EU-EECA ICT Competence Platform (1)

<http://www.eeca-ict.eu/competence>

Objective:

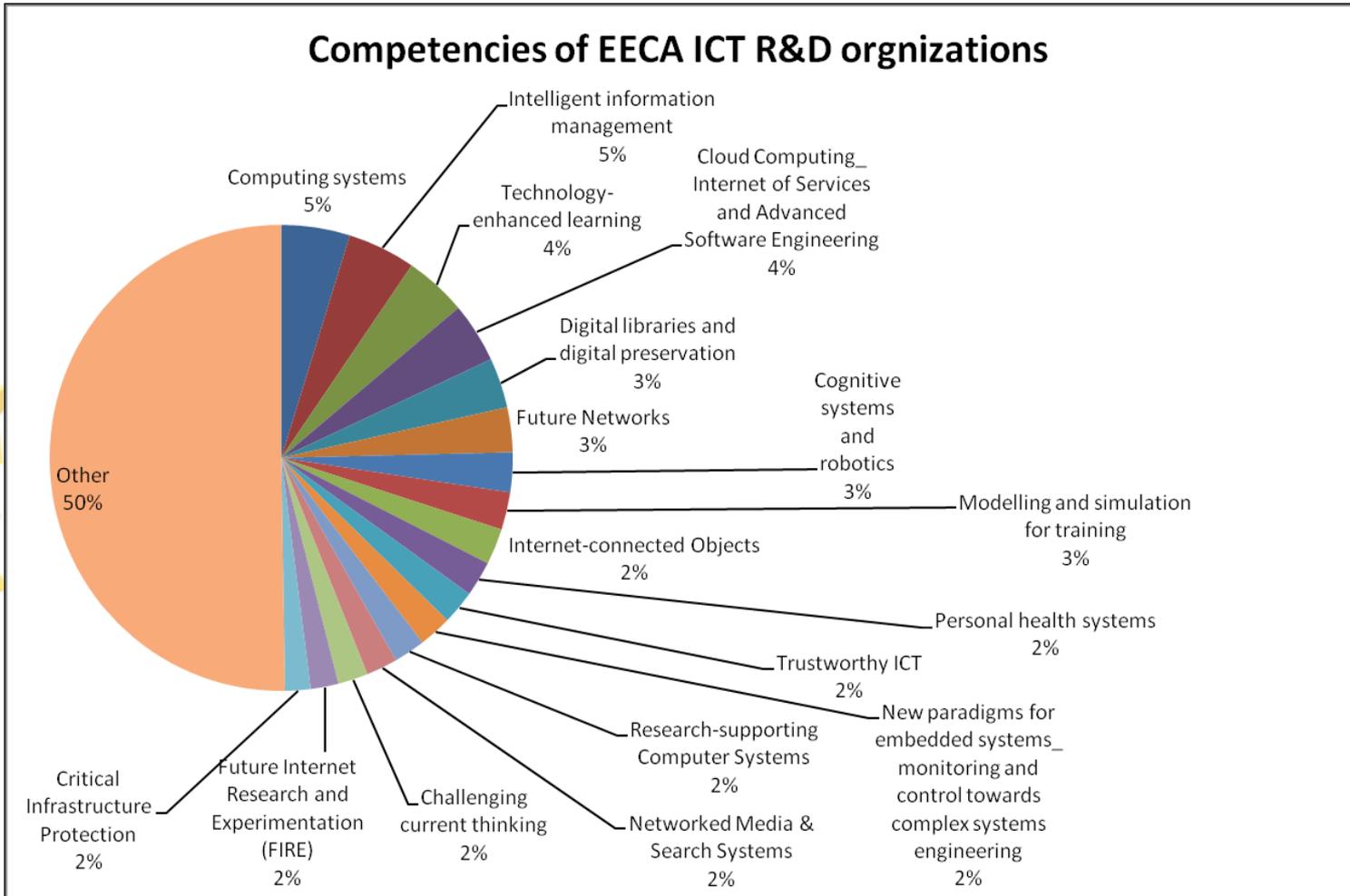
a) identify a 'critical mass of researchers'

Distribution of ICT competences of EECA ICT specialists:



EU-EECA ICT Competence Platform (2)

b) identify a 'critical mass' of research organisations



EU-EECA ICT Competence Platform (3)

- **Top 20 ICT domains** with highest total ratings in the EECA region

#	Domain	Rating
1.	Cloud Computing, Internet of Services and Advanced Software Engineering	140
2.	Computing systems	140
3.	Digital libraries and digital preservation	140
4.	Technology-enhanced learning	140
5.	Future Networks	136
6.	Intelligent information management	136
7.	Cognitive systems and robotics	133
...
20.	Mathematical Foundations of Information Security	98

List of R&D areas with highest potential for cooperation

Armenia	<ol style="list-style-type: none"> 1. <i>Computing systems</i> 2. <i>Intelligent information management, Security, Trustworthy ICT</i> 3. <i>Technology-enhanced learning</i> 4. <i>Components, Systems, Engineering</i> 5. <i>Digital libraries and digital preservation</i> 6. <i>Organic photonics and other disruptive photonics technologies</i> 7. <i>e-Health</i>
Azerbaijan	<ol style="list-style-type: none"> 1. <i>Cloud Computing, Internet of Services and Advanced Software Engineering</i> 2. <i>Cognitive Systems and Robotics</i> 3. <i>Nanoelectronics Technology</i> 4. <i>Computing Systems</i> 5. <i>Digital Libraries and Digital Preservation</i> 6. <i>Intelligent Information Management and Technology-Enhanced Learning</i> 7. <i>e-Health</i> 8. <i>ICT Solutions for governance and policy modelling</i> 9. <i>ICT systems for Energy Efficiency</i>

List of R&D areas with highest potential for cooperation

<p>Belarus</p>	<ol style="list-style-type: none"> 1. <i>GRID and Cloud Computing, High-performance computing, Supercomputing</i> 2. <i>Digital Libraries and Digital Preservation</i> 3. <i>Nanoelectronics Technology, Microelectronics, Components</i> 4. <i>Photonics</i> 5. <i>Internet of Services, Future Internet</i> 6. <i>e- Health</i> 7. <i>ICT for Governance and Policy Modelling, Intelligent Information Management</i> 8. <i>Geo-Spatial Technologies</i>
<p>Georgia</p>	<ol style="list-style-type: none"> 1. <i>ICT for energy efficiency</i> 2. <i>Technology-Enhanced Learning</i> 3. <i>Personal Health Systems</i> 4. <i>Nanoelectronics Technology</i> 5. <i>Internet of Services, Software & virtualization</i> 6. <i>Intelligent Information management</i> 7. <i>Photonics</i>

List of R&D areas with highest potential for cooperation

Moldova	<ol style="list-style-type: none"> 1. <i>Computing Systems</i> 2. <i>Internet of Services, Software & Virtualization</i> 3. <i>Digital libraries and digital preservation</i> 4. <i>Technology-Enhanced Learning</i> 5. <i>Intelligent information management</i> 6. <i>Nanoelectronics Technology</i> 7. <i>ICT for Patient Safety</i>
Ukraine	<ol style="list-style-type: none"> 1. <i>GRID and Cloud Computing, High-performance computing, Supercomputing</i> 2. <i>Electronic governance (e-governance), Intelligent Information Management</i> 3. <i>Internet of Services, Future Internet, Future Networks</i> 4. <i>Microelectronics, Microsystems and smart miniaturised systems</i> 5. <i>Cognitive Systems and Robotics</i> 6. <i>Technology-Enhanced Learning</i> 7. <i>Digital Libraries and Content</i> 8. <i>Electronic Health (e-Health)</i>

Summary of cooperation potential study

EaP countries	ARMENIA	AZERBAIJAN	BELARUS	GEORGIA	MOLDOVA	UKRAINE	Total
ICT R&D PRIORITIES							
...							

MATRIX

The table with EaP countries' ICT priorities helped to identify the ones with similar formulations

- ICT-priorities: the most significant *common* ICT-domains for EaP countries:

- Internet of Services, Future Internet, Grid and Cloud Computing, total sum 8
- Nanoelectronics Technology and Microelectronics Components, Photonics, total sum 8
- Digital Libraries and Content, Digital libraries and digital preservation, total sum 5
- Technology-Enhanced Learning, total sum 5
- Electronic governance and Intelligent information management, total sum 9
- ICT for Health (e-Health, Personal Health Systems, ICT for Patient Safety), total sum 6

Recommended ICT R&D topics for EU-EaP collaboration

Proposed topics:

- Main ICT priorities specified in the national R&D programmes of the EaP countries
- Directed at developing ICT solutions to address the major societal challenges both in EaP and EU27
- Relevant to the main Challenges of the **new H2020**
- Directed towards the development of basic ICT technologies/infrastructures
- The EaP assets: high-level expertise in these topics + critical mass of high-level researchers

Topic 1: GRID and Cloud Computing

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

Topic 3: Nanoelectronics Technology, Microelectronics Components

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

Topic 5: Advanced technology for e-Health

Concluding remark

PICTURE project final goal is:

- to support the creation of a **collaboration environment**
- to keep all elements that constitute EU-EECA cooperation under **continuous dialogue and review**

Thank you for your attention!