

Extending ICT Research Co-operation between the European Union, Eastern Europe and the Southern Caucasus

ISTOK -SOYUZ Final Event

Moscow, 7 June 2011

EXTEND: consultation process and the main findings for the EECA countries

Tofig Babayev Azerbaijan 7FP ICT NCP



EXTEND at a Glance

Title:	Extending ICT research co-operation between the European Union, Eastern Europe and the Southern Caucasus
Туре	Support Action
Start day:	01 January 2009
Duration:	30 months
Consortium	6 EECA countries 2 European countries











Consortium

EECA Countries

MOLDOVA







AZERBAIJAN R.I.T.A.

BELARUS



GREECE



European Union

ROMANIA

















Motivation

Research communities in the Region are not sufficiently aware of the opportunities offered by the Framework Programmes of EU



Very low participation rate of the Eastern Europe and the Southern Caucasus countries in the ICT work-programme











WP 2. Development of recommendations on future ICT research co-operation

Objectives

- To consult key ICT research stakeholders on the ICT research priorities of Eastern Europe and the Southern Caucasus that reflect the actual readiness and needs of the region.
- To develop recommendations on future ICT research cooperation between the EU, Eastern Europe and Southern Caucasus for the period 2010-2015. (The recommendations will provide valuable input for the shaping of future annual FP7 ICT work-programmes and calls for proposals).



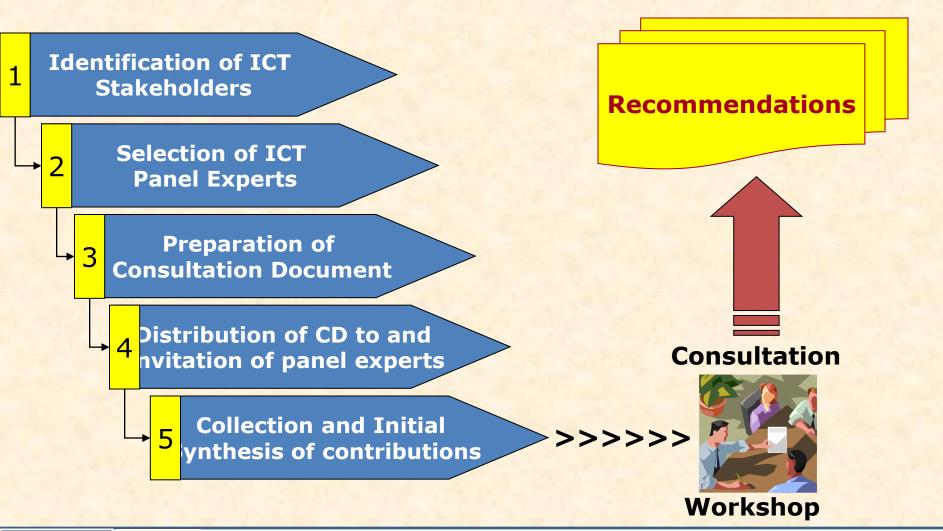








The Consultation Process













Criteria for expert selection

- ☐ 4-5 research actors based on:
 - most active, most experienced in projects
 - If possible, at least 1 academic, 1 private and 1 NGO research organisation representative
- □ 3-4 industrial actors:
 - High representatives of 3 top ICT companies (if possible, <u>at least</u>
 1 software, 1 hardware, 1 telecommunications)
 - At least 1 SME company with potential / highly innovative
- ☐ 3-4 experts in ICT (research) policy making:
 - People who have been involved in policy making (e.g. members of working groups etc.)
 - By de facto people influential due to position (e.g. deputy/assistant minister, head of national agency)
- ☐ 1 representative of most active and experienced NGO for ICT promotion (with civil society perspective)
- ☐ 1-2 representatives of national /international research projects











The Consultation Workshop

- □ Participants
 - 15-20 ICT stakeholders
- □ Objectives of workshops:
 - to rank the top 5 to 10 research priorities of the country following an exercise of <u>evaluation with pre-</u> <u>establish criteria</u>
 - to identify specific objectives and areas of research for each priority











ICT R&D Priorities for 2010-2015 in Belarus

□29 stakeholders filled in the questionnaire, of which

- 1 from public bodies,
- 10 from universities,
- 11 from R&D institutions, including 9 from the National Academy of Sciences,
- 5 from technological parks and associations (NGOs),
- 2 from SMEs.











BELARUS Priorities

Current priorities

Computing Systems

Internet of Services, Software & Virtualization

Digital libraries and digital preservation

Design of Semiconductor Components and Electronic-based Miniaturized Systems

Personal Health Systems

Nanoelectronics Technology

Trustworthy ICT

Cognitive Systems and Robotics

ICT for Patient Safety

2010-2015 priorities

Computing Systems

Personal Health Systems

Internet of Services, Software & Virtualization

Nanoelectronics Technology

ICT for Governance and Policy Modeling

Cognitive Systems and Robotics

Digital libraries and digital preservation

ICT for Patient Safety













ICT R&D Priorities for 2010-2015 in Ukraine

- **□24 stakeholders filled in the questionnaire, of which**
 - 2 from public bodies,
 - 12 from universities,
 - 8 from R&D institutions,
 - 2 from associations













Ukraine Priorities

- 4.2. Technology-Enhanced Learning
- 3.5. Engineering of Networked Monitoring and Control Systems
- 3.6. Computing Systems
- 4.3. Intelligent Information Management
- 5.1. Personal Health Systems
- 1.2. Internet of Services, Software & Virtualisation
- 1.4. Trustworthy ICT
- 7.3. ICT for Governance and Policy Modelling
- 6.4. ICT for Environmental Services & Climate Change Adaptation
- 4.1. Digital Libraries and Digital Preservation











ICT R&D Priorities for 2010-2015 in Azerbaijan

□27 stakeholders filled in the questionnaire, of which

- 1 from public bodies,
- 5 from universities,
- 12 from R&D institutions, including 9 from the National Academy of Sciences,
- 2 from associations (NGOs),
- 2 from SMEs
- 3 from Telecom company,
- 3 from other direct ICT stakeholders.











Azerbaijan priorities



1.2	Internet of Services, Software & Virtualization
2.2	Language-based Interaction
3.6	Computing Systems
4.1	Digital Libraries and Digital Preservation
4.2	Technology-Enhanced Learning
4.3	Intelligent Information Management
7.1	ICT and Ageing
7.3	ICT for Governance and Policy Modeling











ICT R&D Priorities for 2010-2015 in Moldova

- □ 27 stakeholders filled in the questionnaire, of which
 - 3 from public bodies (Ministry, Regulatory authority),
 - 11 from universities,
 - 6 from R&D institutions from the Academy of Sciences of Moldova,
 - 2 from associations (NGOs),
 - 1 from SME,
 - 1 from Telecom company,
 - 3 from other direct ICT stakeholders.









N Current Drievitie

Moldova priorities

*						
* ★	Current Priorities		2010-2015 priorities			
3.1	Nanoelectronics technology	4.2	Technology-Enhanced Learning			
1.2	Internet of Services, Software & Virtualization	7.3	ICT for Governance and Policy Modelling			
1.1	The Network of the Future	1.2	Internet of Services, Software & virtualisation			
5.2	ICT for Patient Safety	3.6	Computing Systems			
3.6	Computing Systems	4.1	Digital libraries and digital			
4.2	Intelligent information management		preservation			
			Intelligent information management Personal Health Systems			
4.3						
7.3	ICT for Governance and Policy Modeling	7.2	Accessible and Assistive ICT			
1.3	Internet of things and enterprise environments	3.1	Nanoelectronics Technology			
5.1	Personal Health Systems	5.2	ICT for Patient Safety			











ICT R&D Priorities for 2010-2015 in Armenia

- □ 20 stakeholders filled in the questionnaire, of which
 - 4 from public bodies,
 - 3 from universities,
 - 7 from R&D institutions, including 6 from the National Academy of Sciences,
 - 3 from technological parks and associations (NGOs),
 - 3 from SMEs



Armenia priorities

	FP7 areas
4.3	Intelligent information management
4.1	Digital libraries and digital preservation
1.4	Trustworthy ICT
3.4	Embedded Systems Design
4.2	Technology-Enhanced Learning
2.2	Language Based Interaction
1.2	Internet of Services, Software & virtualization
3.6	Computing Systems
2.1	Cognitive Systems and Robotics
7.3	ICT for Governance and Policy Modeling











ICT R&D Priorities for 2010-2015 in Georgia

□27 stakeholders filled in the questionnaire, of which:

- 3 National authorities, policy representatives
- 5 SMEs
- 10 from R&D institutions, Research Organisations
- 1 NCPs/NIPs or other EU-related guests
- · 8 other











Georgia priorities

Initial selection	Final selection
3.1 Nanoelectronics Technology	6.3 ICT for energy efficiency
4.1 Digital libraries and digital preservation	1.2 Internet of Services, Software & virtualisation
4.2 Technology-Enhanced Learning	4.2 Technology-enhanced learning
6.3 ICT for Energy Efficiency	3.1 Nanoelectronics Technology
1.2 Internet of Services, Software & virtualisation	4.3 Intelligent Information management
3.7 Photonics	5.1 Personal Health Systems
3.6 Computing Systems	3.7 Photonics
5.1 Personal Health Systems	3.6 Computing Systems
4.3.Intelligent information management	4.1 Digital libraries and digital preservation
6.4.ICT for Environmental Services & Climate Change Adaptation	6.4 ICT for Environment Services and Climate Change











The final table

FP7 Objecti ve	ICT R&D PRIORITIES	ARMENIA	AZERBA IJAN	BELARUS	GEOR GIA	MOLD OVA	UKRAI NE	
	Internet of services,							
1.2	software & virtualization	✓	✓	✓	✓	✓	✓	
3.6	Computing systems	✓	✓	✓		✓	✓	
	Digital Libraries and digital							
4.1	preservation	✓	✓	✓		✓		
	Technology enhanced							
4.2	learning	✓	✓		✓	✓	✓	
	Intelligent information							
4.3	management	✓	✓		✓	✓	✓	
	Cognitive systems and							
2.1	robotics			✓		S.F.W.	✓	
2.2	Language based interaction	✓	✓					
	Nanoelectronics							
3.1	Technology			✓	√	✓		
3.7	Photonics			✓	✓			
5.1	Personal health systems			✓	✓			
5.2	ICT for Patient Safety			✓		✓		
	ICT for Governance and							
7.3	Policy Modelling		✓	✓				











Comments:

- ➤ Targeted regional / SICA calls should be developed for common EU-EECA ICT R&D priorities such as Objective As mentioned by some of the experts consulted researchers in the region 'raise questions about the existence of real opportunities in investing time and effort in FP7 proposal preparations'.
- Support actions on FP7 procedures and proposal development are still considered important for the region,.
- Projects that will address and further support the EU's Eastern Partnership policy will be beneficial for strengthening the R&D collaboration between the EU and EECA.











Comments:

- ➤ The comparison and 'alignment' of the identified country-specific priorities to the FP7 Challenges was not always smooth .One of the suggestions made by experts was to involve European Commission staff (i.e. from DG Information Society and Media) in future consultations that aim to define common EU-EECA ICT R&D priorities.
- Complex terminology and description of FP7 challenges and objectives to be taken into account in the development of future ICT work programmes.
- ➤ The question of follow-up of the identified common ICT R&D priorities from the side of the EU was raised during the consultations. Specifically, experts questioned how the project's results will be exploited/used in the near future by the European Commission.
- Similarly, experts questioned how the ICT R&D identified priorities can be used nationally and 'individually' by the involved stakeholders within the consultation. It is obvious that the results of the project need to be well communicated within the national policy and R&D communities so as to enable their future exploitation.











Problems:

- ✓ Lack of collaborative team work experience both a national and international level
- ✓ Low level project management skills in research teams
- ✓ Low awareness in Europe about the EECA national research teams
- ✓ Lack of funds for participating in European events, conferences, infodays, proposers meetings,
- ✓ Weak technical basis in research infrastructure
- ✓ The industrial sector is not enough developed to become a driving force for research
- ✓ Techno parks and techno centers, business incubators are not established.
- √ Absence of innovative small and medium enterprises (SMEs)
- ✓ Researchers' low capacity in communicating and working in English









The above mentioned issues will be the brought forward as subjects of sessions at the final Conference in view of their verification and consolidation to be integrated at the final version of the Policy Recommendations document.





Thank you for attention!

Tofig Babayev
Azerbaijan 7FP ICT NCP

tbabayev@bk.ru