

# **How to contrast barriers to research cooperation: Policy recommendations for increasing WBC participation in FP7/ ICT**

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## Presentation Outline

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# The Information & Communication Technologies (ICT) Framework in Europe

## **Strategy / Governance**

- “i2010”: EU policy framework for the information society and media
- One of the main priorities (“pillars”) of “i2010” is innovation and investment in ICT research
- IST Advisory Group (ISTAG) advises the EC on ICT scientific objectives and technological priorities

## **Funding**

- Framework Programme (FP)
- European Technology Platforms (ETP)
- Joint Technology Initiatives (JTI)
- ICT Policy Support Programme under the CIP

## **Intra-governmental Coordination**

- National ICT Research Directors Forum

## **Support for Western Balkan Countries (WBC)**

- SCORE
- ICT-WEB-PROMS
- WINS-ICT

# The RTDI and ICT state of play in the Western Balkan Countries

Current level of preparedness, technical expertise for ICT RTD, and competitiveness of research institutions in the WBC is generally low

**Table 1** International competitive standing of WBC regarding RTDI and ICT

Country	2009-2010 Global Competitiveness Index		Global Information Technology Report Networked Readiness Index 2009-2010		
	Technological Readiness Rank	Innovation Rank	Environment component	Readiness component	Usage component
Albania	89 of 133	126 of 133	105 of 133	103 of 133	89 of 133
Bosnia-Herzegovina	95 of 133	131 of 133	118 of 133	116 of 133	103 of 133
FYR of Macedonia	52 of 133	92 of 133	77 of 133	75 of 133	65 of 133
Kosovo/ UNSCR1244	n/a	n/a	n/a	n/a	n/a
Montenegro	45 of 133	56 of 133	43 of 133	41 of 133	46 of 133
Serbia	78 of 133	80 of 133	90 of 133	66 of 133	84 of 133

**Table 2** Number of WBC successful FP applications in the ICT field

Country	FP6 IST (total)	FP7 ICT (up to Call 4)
Albania	9	2
Bosnia-Herzegovina	8	2
FYR of Macedonia	12	3
Kosovo/ UNSCR1244	0	1
Montenegro	19	3
Serbia		18

## Barriers and Shortcomings related to ICT RTDI in the WBC

- ✧ **Structural** (institutional, administrative and political deficiencies)
  - low level of national funds for ICT research and lack of donor coordination
  - large discrepancy between the normative regime and the actual state of affairs in ICT RTD
  - low degree of transregional intergovernmental coordination
  - weak lobbying capacity in the EU
  
- ✧ **Academic-related**
  - education system not in line with needs of ICT industry
  - weak networks among researchers and R&D organisations within the region and between the region and rest of Europe
  - poor RTDI-enabling infrastructure (facilities and equipment)
  
- ✧ **Business-related**
  - low private sector participation in R&D
  - insufficient collaboration between the ICT industry and academia
  - lack of appropriate state initiatives (e.g. tax incentives, technology parks)
  - inability to attract Foreign Direct Investments (FDI) in ICT RTD
  
- ✧ **Other “Soft” Issues**
  - “brain-drain”
  - low researchers’ international and intraregional mobility
  - lack of professionals to provide assistance on proposal writing and project management
  - low international reputation and scientific image of WBC

## Insights from the ICT-WEB-PROMS project

- ✧ Survey among ninety-one WBC stakeholders from September 2009 to March 2010
- ✧ Overall, the ICT-WEB-PROMS survey confirmed to a large extent the findings of previous relevant research

**Table 3** Common obstacles in accessing research funds in the WBC

Type of Obstacle	Responses for national programmes	Responses for EU programmes
Lack of national funding / Low EU funding level	61	11
Lack of information on funding sources	42	29
Bureaucratic procedures	41	24
Programmes not matching organization's expertise	31	17
Lack of transparency in the allocation of funds	23	n/a
Lack of experts	23	n/a
Difficulty with networking and identifying partners	21	20
Lack of knowledge of project management	17	n/a
Lack of clear guidelines	16	12
Lack of communication with the NCP for ICT	14	n/a

# Challenges regarding the 7<sup>th</sup> Framework Programme (FP7)

## Background Information

- ✧ 2008: all WBC **fully associated** to FP7 (exception is Kosovo/UNSCR1244, which participates as an International Cooperation Partner Country)
- ✧ EC's principles for proposals evaluation and selection: **Excellence** (comprising the criteria of scientific and technological merit; relevance; impact; implementation), **Transparency, Fairness and Impartiality, Confidentiality, Efficiency and Speed in Evaluation, Ethical and Security Considerations**

## Challenges for the Western Balkan Countries

- ✧ Harmonisation of their domestic research legislation with the FP7 regulatory framework needs to be further improved
- ✧ Interested parties with no previous FP experience are usually disincentivised by the **complexity of project management**
- ✧ FP **dominated by a few “closed” consortia** that achieve high selection rates on account of their “virtuous circle” of ever-increasing participation and experience in FP calls
- ✧ FP are inherently **“elitist”** and **very selective**
- ✧ European integration of research stakeholders with lesser capacity could be achieved through **other funding instruments** (e.g. national funding programmes or international tools primarily concerned with cohesion)

## ICT Research Priorities in the WBC (according to SCORE project)

ICT Research Priorities	ALBANIA		BOSNIA-HERZEGOVINA		FYROM		SERBIA		CROATIA		MONTENEGRO		All WBC
	Ready now	Future Potential	Ready now	Future Potential	Ready now	Future Potential	Ready now	Future Potential	Ready now	Future Potential	Ready now	Future Potential	Readiness
ICTs for Enterprises & eBusiness	✓		✓		✓		✓		✓		✓		6
ICTs for Government & eGovernment	✓		✓		✓		✓		✓			✓	5
Network technologies (Internet & Broadband Technologies, Mobile Technologies)	✓			✓	✓		✓		✓		✓		5
ICTs for Learning & eLearning	✓		✓		✓			✓	✓		✓		5
ICTs for Health & eHealth	✓		✓			✓	✓		✓		✓		5
Environment and energy...		✓	✓				✓		✓		✓		4
Software Engineering		✓		✓	✓		✓		✓			✓	3

- ✧ Each of the WBC alone is considered probably **too small and weak in terms of the “research excellence”** required for participating in FPs and for playing an important role in the ERA
- ✧ Their **actual level of research capacity and competence has been highly disputed**, prompting the EC (DG Information Society) to undertake a **Technological Audit**, due for completion in the summer of 2010 (expected to be presented in Belgrade, November 30, 2010)

## Policy Recommendations related to ICT RTDI in the WBC

Several projects and studies in the last five years have suggested policy frameworks towards reinforcement of the research capacity of WBC. They all contain to some extent the following recommendations:

### **Institutional**

- regional cooperation
- improved enforcement of ICT RTD legislation
- reduced bureaucracy
- transparency in the selection of state-funded ICT RTD

### **Implementation-related**

- improved ICT RTD infrastructure
- enhanced collaboration between basic and applied research
- enhanced collaboration between academia and business community

### **Human Resources-related**

- further capacity-building and training of WBC civil servants and researchers
- financial incentives for preparatory actions (e.g. researchers' travel and mobility grants)
- availability of ICT courses and IT skills at all levels of education
- measures against “brain-drain”

## Insights from the ICT-WEB-PROMS project

WBC research practitioners seem to favour National Strategies for ICT that address both European and National funding mechanisms in a combined manner

**Table 4** Suggested important elements in National Strategies for ICT

“Extrovert” Disposition (number of responses out of 91 in total)		“Introvert” Disposition (number of responses out of 91 in total)	
Financial Incentives for preparation for joining FP7 ICT programmes	42	Financial Incentives for research projects at national level	38
Developing new ICT research competencies	36	Building support for existing ICT research competencies	39
International mobility of researchers	33	Mobility of researchers at national level between industry and academia	27

- ✧ Opinions among the 91 respondents regarding important elements of the National ICT Strategies were **balanced between a more “extrovert” and a more “introvert” set of responses**
- ✧ This notion is reinforced by the fact that another 27 respondents selected “All the above” elements, hinting at the **need for an even-handed policy mix towards mutual convergence of national and EU research programmes in the WBC**

## A comprehensive strategic plan for WBC integration into the European Research Area (ERA) and FP7

“WBC Transregional ICT RTD excellence strategy”, the cornerstone of the whole approach:

Western Balkan Countries authorities should jointly concentrate on one or maximum two ICT research thematic priorities (based mainly on the DG InfSo Technological Audit findings and a realist mentality), around which they shall coordinate their effort for FP and CIP participation on equal footing.

# A comprehensive strategic plan for WBC integration into the European Research Area (ERA) and FP7

## Main Features

- ✦ Coordination at Transregional level under the auspices of the EC
- ✦ Alignment among all key stakeholders (academia, public sector, private sector)
- ✦ Non-ambiguity, i.e. specific milestones within a fixed timeframe
- ✦ Iterative, i.e. including monitoring and modification mechanisms

## Guiding Principles

- ✦ Leading, “hands-on” role of the EC in a top-down implementation
- ✦ FP participation should not be regarded a panacea or an end in itself
- ✦ The approach should cater for the identification and support of both:
  - One or two ICT research excellence areas at transregional level
  - Thematic areas that may not be competitive at European level, but make economic and / or social sense at the domestic level

# A comprehensive approach for WBC integration into the European Research Area (ERA) and FP7

- ✧ **What should the EC do?**
  - Adopt an incentives policy towards WBC at FP level that should ease first-time entry at successful consortia (even if only in the form of “apprenticeship”)
  - Enhance its coordination authority in the region and push for the implementation of the “Transregional ICT RTD excellence strategy”
  - Safeguard rational spending of available (non-domestic) funding sources
- ✧ **What should the WBC authorities do?**
  - Facilitate, at national level, differentiation between researchers who demonstrate larger capacity that is competitive in pursuing international excellence; and researchers who have smaller capacity, useful mainly for domestic priorities
  - Commit, at high policy (i.e. governmental) level, to sincere cooperation in the context of the “Transregional ICT RTD excellence strategy” implementation
  - Provide RTD practitioners with clear guidelines regarding funding opportunities
- ✧ **What should WBC researchers and development practitioners do?**
  - Capitalise all the ERA/FP-related technical assistance they have received and will continue to receive (e.g. by projects such as ICT-WEB-PROMS) in the form of a “permanent soft infrastructure”, and act locally as multipliers
  - Facilitate and actively pursue increased interaction and cooperation between the academic and the business sector.
  - Select and plan their RTD activity taking into consideration the strategic priorities, the policy mix and the funding opportunities under the “WBC Transregional ICT RTD excellence platform