

SCUBE ICT

GATEWAY TO UKRAINIAN & BELARUSIAN ICT RESEARCH

*“Strategic Cooperation in Ukraine, Belarus and EU
in Information and Communication Technologies”*

(Grand Agreement No 231148)

Barriers and initial recommendations for enhanced EU-Belarus ICT R&D collaboration

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- ⇒ ***Introduction – benefits, risks and existing opportunities for EU-Belarus ICT RTD collaboration***
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Benefits

⇒ **Financial support**

- ✓ *Reduce the development risk*
- ✓ *Reduce time-to-market*
- ✓ *Avoid 'brain-drain'*

⇒ **Increase visibility and reputation**

- ✓ *New partnerships*

⇒ **Remain up-to-date with scientific and/or business developments**

⇒ **Increase competencies**

- ✓ *Knowledge/experience transfer*

⇒ **Access advanced technology tools / infrastructures**

Risks

- ⇒ **Intense competition discourage 'newcomers'**
- ⇒ **The benefits usually are medium to long term**
- ⇒ **Financial implications may emerge from the application of both national and European legislation**
- ⇒ **Project implementation brings administration overhead**
- ⇒ **Finding a suitable role that may lead to benefits is not always easy**

Existing opportunities

⇒ **FP7 - "Cooperation" Programme**

✓ *Theme3: Information and communication Technologies (ICT)*

⇒ **FP7 - "Capacities" Programme**

✓ *Action 1: Research Infrastructures*

✓ *Action 2: Research for Benefits of SME*

⇒ **FP7 - "People" Programme**

⇒ **European Technology Platforms (ETPs)**

⇒ **International Sciences and Technology Centre (ISTC)**

⇒ **TEMPUS**

⇒ **ERASMUS-MUNDUS**

⇒ **Cross Border Cooperation (CBC) Scheme – European Neighborhood and Partnership Instrument (ENPI)**

✓ *Baltic Sea Region; Poland/Belarus/Ukraine; Latvia/Lithuania/Belarus*

Current Status

- ⇒ **Belarusian universities have partnerships with universities from 57 countries**
 - ✓ *More than 50% of the international projects involving BY organisations are performed by universities*
- ⇒ **A small number of FP5 and FP6 IST projects involve BY research organisations**
 - ✓ *Only 5% of the BY universities are involved in ICT research with EU*
- ⇒ **'Popular' funding instruments:**
 - ✓ *International Science and Technology Centre (ISTC)*
 - ✓ *International Association for the promotion of co-operation with scientists from the New Independent States (INTAS)*
- ⇒ **Belarus is increasingly emerging as a low cost hub for high quality S/W development**
 - ✓ *s/w and IT services exports are 3 times larger than the domestic market*

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Barriers

1. Lack of ICT research cooperation between Belarus and Europe

2. Lack of awareness amongst Belarusian ICT R&D actors of the FP7-ICT opportunities

✓ *Programme and skills required*

3. Lack of ICT related technology transfer between research institutes and private sector

4. Lack of ICT policy monitoring system

✓ *based on standardised, internationally recognised ICT indicators/statistics*

✓ *for ICT policy development, monitoring, evaluation and impact assessment*

Rec. Actions addressing barrier 1

"low EU-BY ICT R&D collaboration"

1. Encourage research collaboration

- ⇒ Fund Special International Cooperation Actions (SICA projects) under FP7
- ⇒ Encourage participation in ENPI – CBC programmes

2. Facilitate networking and direct discussions

- ⇒ Fund Support Actions to promote EU-Belarus collaboration
- ⇒ Organise (bi-)annual EU/Belarus scientific / policy workshops
 - ✓ *To identify/agree on the ICT R&D areas of common interest forming the basis of future SICA FP7-ICT Calls*

Actors involved:	DG INFSO, RTD actors in EU and Belarus, Belarusian authorities (State Committee of Science and Technology, Ministry of Education), ETPs, Belarusian research diaspora, EU-Belarus Delegation, JTS-CBC programme
Time horizon:	2011-2015

Rec. Actions addressing barrier 2

"awareness of FP7-ICT opportunities"

1. Organize (bi-)annual EU-Belarus scientific / policy workshops

- ✓ *To identify/agree on the ICT R&D areas of common interest forming the basis of future SICA FP7-ICT Calls*

2. Launch SICA research projects under FP7 and FP8 as well as Support Actions

3. Organise regular awareness raising/training workshops involving EU ICT experts

Actors involved:	DG INFSO, RTD actors in EU and Belarus, Belarusian authorities (State Committee of Science and Technology, Ministry of Education, Ministry of Communications and Informatization), ETPs
Time horizon:	2011-2015

Rec. Actions addressing barrier 3

"ICT-related knowledge transfer"

1. Fund Special International Cooperation Actions (SICA projects) under FP7

2. Facilitate the mobility of BY researchers

- ✓ *Setup agreements with EU leading research institutions for joint experiments, internships, etc*
- ✓ *Through suitable funding (e.g. FP7-Capacities programme)*

3. Launch competitive "technology-transfer" programmes at national level, where EU RTD actors will be encouraged to participate (at their own costs)

- ✓ *Bottom-up approach: the government defines broad ICT themes and consortia formulate their specific ideas*

Rec. Actions addressing barrier 3 (cont.)

“ICT-related knowledge transfer”

4. Launch project(s) focused on transferring EU know-how and expertise in ICT technology transfer

✓ *E.g. via the EuropeAid country based support scheme*

5. Organize workshop(s)/session(s) on ICT technology transfer during international events

Actors involved:	DG INFSO, RTD actors in EU and Belarus, Belarusian authorities (State Committee of Science and Technology, Ministry of Education, Ministry of Communications and Informatization), EU leading ICT actors EU Technical Assistance (EuropeAid), Business Incubators and Innovation Centres Association
Time horizon:	2011-2015

Rec. Actions addressing barrier 4

"ICT monitoring system"

1. Fund joint project(s) focused on transferring EU know-how and experience of ICT R&D policy development, indicators, monitoring and evaluation.

- ✓ *Complementing current work already done by the Belarusian government*
- ✓ *Focus on developing a national statistics system for monitoring social and economic transformations*
- ✓ *E.g. via the EuropeAid country based support scheme*

Actors involved:	Belarusian authorities (State Committee of Science and Technology, Ministry of Education, Ministry of Communications and Informatization), EU-Belarus delegation
Time horizon:	2011-2015

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 - ⇒ ***EU-Belarus collaboration barriers and recommended actions focusing on enhancing the involvement of private companies***

Barriers

1. Lack of awareness in Europe of the strengths of the Belarusian ICT sector

2. Lack of awareness amongst Belarusian ICT R&D actors of the FP7-ICT opportunities

✓ *Programme and skills required*

3. Lack of ICT policy monitoring system

- ✓ *based on standardised, internationally recognised ICT indicators*
- ✓ *for ICT policy development, monitoring, evaluation and impact assessment*

Rec. Actions addressing barrier 1

“visibility of BY ICT private sector in EU”

- 1. Fund SICA research projects as well as Support Actions under FP7 and FP8**
- 2. Organise regularly FP7 ICT raising/training workshops involving EU ICT experts**
- 3. Launch competitive “technology-transfer” programmes at national level, where EU RTD actors will be encouraged to participate (at their own costs)**
 - ✓ *Bottom-up approach: the government defines broad ICT themes and consortia formulate their specific ideas*
- 4. Encourage greater use of ISTC technology and research partnerships programmes**
 - ✓ *The programmes enables ISTC members to utilise R&D and technology knowhow of Belarusian organisations*

Rec. Actions addressing barrier 1

"visibility of BY ICT private sector in EU"

5. Encourage private ICT actors to make greater use of ICTT to promote their capabilities.

- ✓ *E.g. exploit the opportunities of international workshops*

Actors involved:	DG INFSO, EU-Belarus Delegation, Belarusian authorities (State Committee of Science and Technology, Ministry of Education, Ministry of Communications and Informatization), organisations representing Belarusian ICT industry (business associations, Hi-Tech Park, etc)
Time horizon:	2011-2013

Rec. Actions addressing barrier 2

“awareness of FP7-ICT opportunities”

- 1. Fund Special International Cooperation Actions (SICA projects) and Support Actions under FP7 (and FP8)**
- 2. Organise regular awareness raising/training workshops involving EU ICT experts**
- 3. Organise (bi-)annual EU-Belarus scientific / policy workshops**
 - ⇒ To identify/agree on the ICT R&D areas of common interest forming the basis of future SICA FP7-ICT Calls

Actors involved:	DG INFSO, EU-Belarus Delegation, Belarusian authorities (State Committee of Science and Technology, Ministry of Education, Ministry of Communications and Informatization), organisations representing Belarusian ICT industry (business associations, Hi-Tech Park, etc)
Time Frame	2011-2015

Rec. Actions addressing barrier 3

"ICT monitoring system"

1. Fund joint project(s) focused on transferring EU know-how and experience of ICT R&D policy development, indicators, monitoring and evaluation.

- ✓ *Complementing current work already done by the Belarusian government*
- ✓ *Focus on developing a national statistics system for monitoring social and economic transformations*
- ✓ *E.g. via the EuropeAid country based support scheme*

Actors involved:	Belarusian authorities (State Committee of Science and Technology, Ministry of Education, Ministry of Communications and Informatization), EU-Belarus delegation,
Time horizon:	2011-2013

Aggregate list of recommended actions to enhance EU-Belarus research collaboration in the field of ICT

List of recommended actions (1/2)

- 1. Fund dedicated SICA projects and support actions under FP7 and FP8**
- 2. Encourage participation in**
 - ✓ *ENPI – CBC programmes*
 - ✓ *ISTC (International Science and Technology Centre)*
- 3. Facilitate the mobility of BY researchers**
 - ✓ *Setup agreements with EU leading research institutions for joint experiments, internships, etc*
- 4. Launch competitive “technology-transfer” programmes at national level, where EU RTD actors will be encouraged to participate (at their own costs)**
 - ✓ *Bottom-up approach: the government defines broad ICT themes and consortia formulate their specific ideas*

List of recommended actions (2/2)

5. Organise (bi-)annual scientific / policy workshops

- ✓ *To identify/agree on the ICT R&D areas of common interest forming the basis of future SICA FP7-ICT Calls*

6. Organise regular awareness raising/training workshops involving EU ICT experts

7. Launch project(s) focused on transferring EU know-how and expertise in ICT technology transfer

8. Fund project(s) focused on transferring EU know-how and experience in ICT R&D policy development, indicators, monitoring and evaluation

- ✓ *Complementing current work already done by the IBRD project*
- ✓ *Focus on developing a national statistics system for monitoring social and economic transformations*
- ✓ *E.g. via the EuropeAid country based support scheme*