"Exploring the collaboration between industry and academia in South-Eastern Europe within the scope of the I-SEEMob project"

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Increasing knowledge transfer between academia and industry is a key goal of the European Commission's innovation plan and EU 2020 vision

Thus, it is important:

- Understand the level of communication between these two sectors
- Their motivation for mutual collaboration
- The barriers that exist to such collaboration

Presentation Outline:

- The level of inter-sectoral collaboration in eight countries of South-Eastern Europe from both points of view – academia's and industry's
- Stakeholders' motivation for collaboration, satisfaction with existing connections and the barriers they both perceive as impeding to better collaboration
- Additional skills that researchers need to acquire in order to be more attractive to the private sector

I-SEEMob project

- **Title:** 'Inter-sectoral mobility of researchers in South-Eastern Europe'
- **Project duration:** 1/1/2009 - 30/6/2012
- **Call:** FP7-Capacities, International Cooperation - 2007
- **Type of funding scheme:** Coordination and Support (Coordination)
- **Consortium** (9 partners, 8 countries):
  - General Secretariat for Research and Technology, GR (CO)
  - Centre for Research and Technology Hellas, GR
  - The Scientific and Technological Research Council, TR
  - Sofia University "St. Kliment Ohridski", BG
  - University of Nis, RS
  - Agency for Mobility and EU Programmes, HR
  - Macedonian Academy of Sciences and Arts, FYROM
  - Unitatea Executiva pentru Finantarea Invatamantului Superior si a Cercetarii Stiintifice Universitare, RO
  - Ministry of Civil Affairs, BA

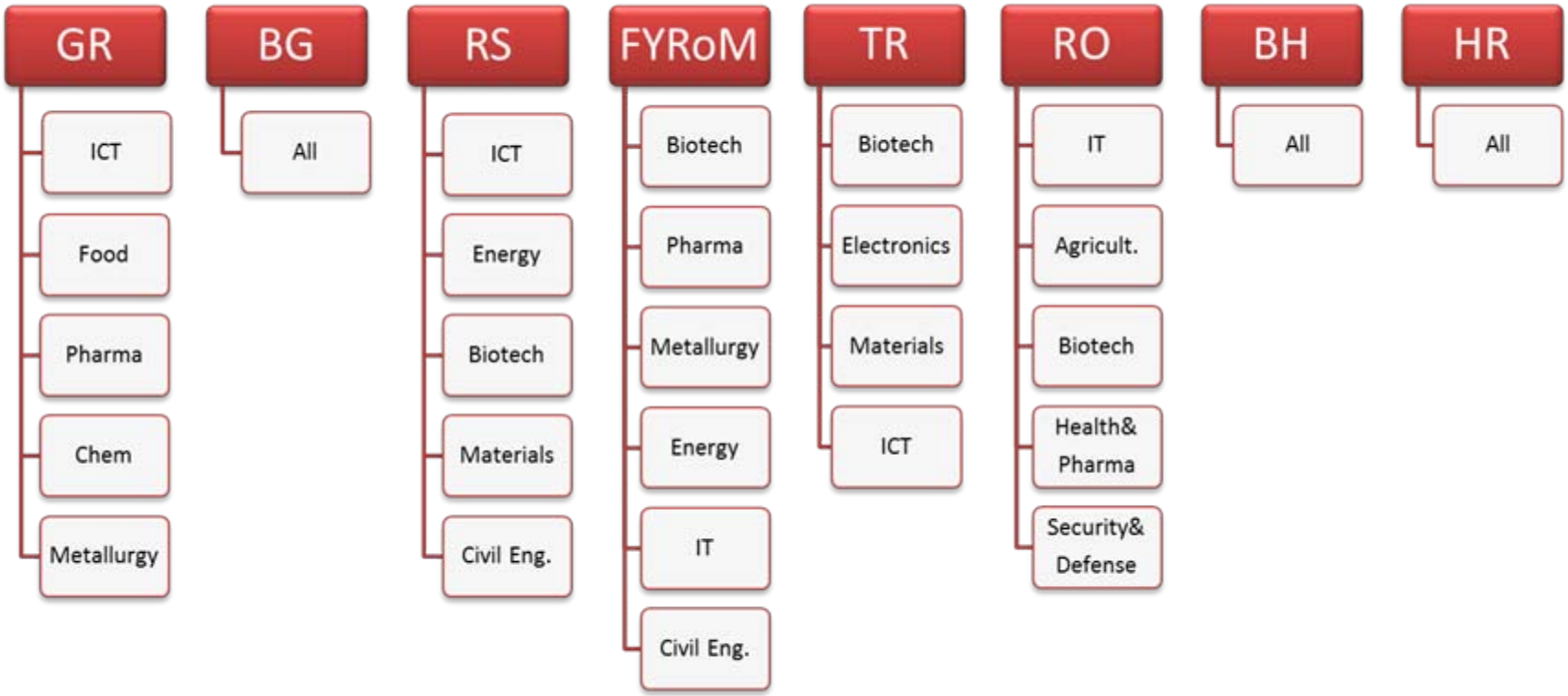
I-SEEMob Activities

- **Objective:** Enhance the career development of R&D personnel in ERA by:
  - Examining the existing legal and research policy gaps hampering the inter-sectoral mobility of R&D personnel in the South-Eastern European countries participating in the consortium
  - Providing recommendations and guidelines to the respective governments so as to raise the remaining obstacles and promote inter-sectoral mobility and the career development of researchers
- **Main Activities**:
  - Mapping exercise on the current state of industrial representation on R&D sector in SEE and its respective needs
  - Legislation gap analysis examining the legislative framework for career development of researchers in SEE
  - Development of policy guidelines for the formulation of common research policies for enhancing the inter-sectoral mobility of researchers

Industry-Academia: Exploring the level of cooperation (WP2)

- In the framework of the mapping exercise on identifying the current state of industrial representation on R&D sector in SEE and its respective needs
- **Methodology**:
  - **Task 2.1**: Identify the number of industries which operate R&D departments or are engaged in R&D activities in the 8 countries of the consortium and create a database with them (desk exercise; feedback from national authorities, existing databases, contact lists etc.)
  - **Task 2.2**: Collect information on the additional skills and competences (i.e. communication skills, awareness of IPR issues, research management training, how to communicate research results, how to build successful spin-offs etc.) that university graduates and researchers need to acquire in order to be more "attractive" to employers in the industrial sector (through the use of online questionnaires)

Focus on selected sectors



I-SEEMob Database

(http://www.iseemob.eu/sitegenius/my/product_search_simple.php?searchType=list)

- **GR**: 122 contacts
- **TR**: 49 contacts
- **RO**: 51 contacts
- **BG**: 30 contacts
- **FYROM**: 54 contacts
- **RS**: 130 contacts
- **BA**: 48 contacts
- **HR**: 85 contacts

In total: 569 contacts

Exploring needs and obstacles

- **Development of two questionnaires**: One targeting industrial representatives (use of the database contacts) and one targeting academics/researchers
- Objectives of the questionnaires:
  - Identify the **needs of industry** for additional skills and competencies researchers should acquire to make them more attractive as employees and future collaborators with industry sector
  - Discern **both sectors' opinion on remaining barriers** to inter-sectoral mobility

This survey is still ongoing!

Results

- Companies of all sizes participated in the survey (micro,small, medium,large)
  - Large companies: Romania, Turkey
  - Micro, small: Greece, BA, FYROM
  - All sizes: Bulgaria, Serbia, Croatia

Micro: <10 employees, annual turnover/balance sheet not exceeding 2 m. Euros

Small: <50 employees, not exceeding 10 m. Euros

Medium: <250 employees, not exceeding 43 m. Euros

Large: >250 employees

- ¾ have R&D departments

  By country:
  - RO, BG: 90%
  - TR: 80%
  - HR: 75%
  - BA: 70%
  - GR, FYROM: 60%
  - RS: 55%

Results

- **With the exception of Greece**, surveyed companies cooperate mostly with unis, close second being with other companies. A relatively high degree of cooperation is also noted with public institutes, with low level of cooperation carried out between industry and private institutes
- Respondents from all countries reported relatively high levels of satisfaction with the quality of the cooperation.
- However, respondents reported relatively smaller levels of satisfaction with the commercial value of research cooperation
- On average, respondents see their companies as having long-term visions, placing importance on innovation and new technologies, with adequate HRs, but relatively low financial resources. They also identify only few problems with confidentiality issues in intersectoral cooperation

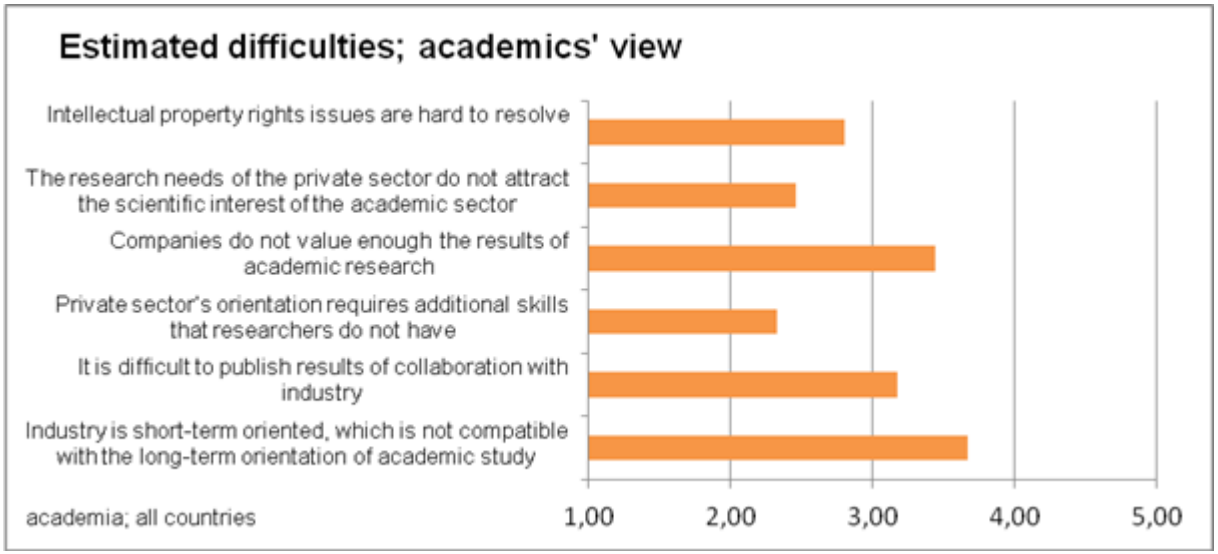
Results

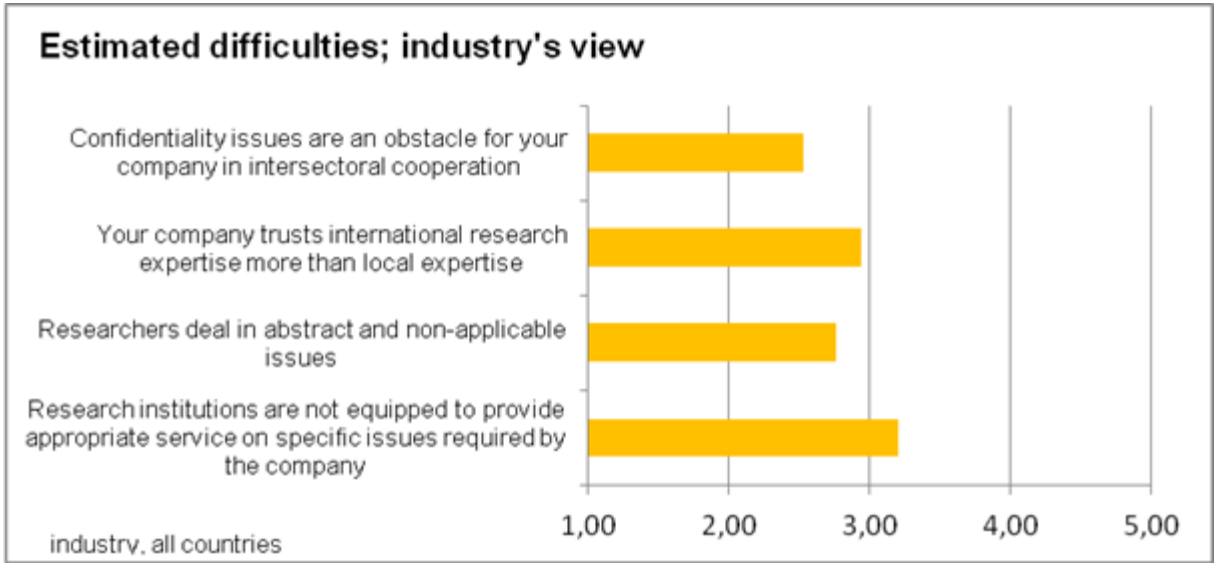
- Across all countries, it is obvious that most respondents expect the industry to take the lead for enhancing the level of cooperation with the academic sector
- In the question **"How would you rank the following 4 measures from the most efficient to the least efficient in encouraging cooperation between academia and industry"**, the respondents rated as most important "Direct government support through co-financing of joint research projects between academic institutions and industry"; second in importance are rated "tax reliefs to companies for investments in own R&D" and "tax reliefs to companies for investments in joint research and/or development programmes with research institutions" and last was rated the "safe legal framework for industrial projects to be implemented in academic institutions"

Results

- **In the question "what percentage of its profit does your company invest in R&D?":**
  - >15%: BG, RO
  - 10-15%: GR
  - 5-10%: BA
  - 0-5%: HR, FYROM, RS, TR
- In the question about "familiarity with EU research programmes"
  - FP7: BG, RO, TR, BA, RS
  - CIP: BG, FYROM
  - EU RPP: BG, RO, TR, RS, HR

Barriers to cooperation





Researchers' skills

The questions examined the level to which young researchers possess particular skills necessary for work in industry (innovative thinking, computer literacy, technology transfer skills, team work, presentation and communication skills, knowledge of IPR, managerial and entrepreneurial skills), as well as the general level of knowledge received at universities (whether it is up-to-date, adequate for the market, as good as knowledge received in foreign institutions). The respondents from both sectors were asked to assign grades from 1 to 5 (1 being the lowest)

Thus:

- The industry's opinion of the received skills was higher than academia's, with the acquirement of four skills getting a grade higher than 3, and none lower than 2. The academia graded only the reception of two skills with a grade higher than 3, and most of the others around 2,2 – with the acquirement of knowledge of IPR graded with 1,68.
- The general opinion of the quality of education received in national universities shows lower grades from both sectors, especially when asked about the adequate preparation of university graduates for work on the market.

Conclusions

- These results point out to a more sceptical attitude of the academic community towards inter-sectoral cooperation – whilst they are interested in cooperation, they perceive more barriers than their counterparts in the private sector
- The study also shows several gaps in the education of young researchers and their preparation for work in or with the private sectors
- These indicators can serve towards concerted regional and national efforts in order to create and foster a better environment for inter-sectoral cooperation

Thank you

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