

Joint Research Centre Round Table

18th November 2008

Conclusions

The JRC Round Table aimed at stimulating the collaboration between the Bulgarian science and technology organizations and the JRC. The speakers and the participants had an opportunity to present highlights of recent JRC work and aimed to encourage dialogue, identify potentially interested partners and to lay the foundations of future common initiatives.

After the opening session the audience split into three thematic Round Tables in order to discuss particular aspects:

- Round Table A on Energy, Climate Change and Natural Hazards
- Round Table B on GMOs in Food, Metrology
- Round Table C on Nuclear Safety and Security

A series of conclusions and proposals for collaboration were drawn during the three aforementioned sessions.

1. Round Table A on Energy, Climate Change and Natural Hazards

- Since the intentions of Bulgaria is to implement the good practices from EU member states, collaboration with the JRC IES, participation in 7FP-projects and in ERA-NET in the field of climate change is important. There is a growing interest for collaboration in the field and specific topics for joint activities were welcomed.
- The Bulgarian colleagues have noted some of their needs: capacity building, in all fields of research; bringing science to society; developing communication strategy between researchers and to stakeholders; national/international projects; cooperation between the institutions; exchange of ideas, know-how; reference land-cover model; simulation and prediction models for risks assessment. In some of these areas the JRC could also give assistance to the Bulgarian researchers.
- Good contacts exist already with the National Institute on Metrology and Hydrology (NIMH) on the European Flood Alert System. New work could start in the area of rainfall downscaling for flood forecasting and climate change (Prof. Neytor). The JRC would be also interested to collaborate more on droughts.
- Collaboration with the relevant authorities has to be explored in the area of energy efficiency: Ministry of Energy and Energy Resources, Energy Efficiency Agency (Mrs. Borianna Koeva-Uzunova).
- New contacts could be created to groups working on 2nd /3rd generation PV technologies (Bulgarian Academy of Sciences, Central Laboratory of Solar Energy and New Energy Sources (Prof. Dimova-Malinovska). Prof. Dimova-Malinovska could be invited to ESTI for a technical visit to explore collaboration opportunities. The focus is also related to the expectations of an increased interest in the near future in large-scale deployment of PVs.

- Another area of interest for the JRC would be to obtain more solar radiance data for verifying PV-GIS predictions, via Dr. Vachev at the Institute for Nuclear research and Nuclear Energy (which has combined stations for meteo and ionising radiation measurements) or the National Institute of Metrology and Hydrology (Prof. Kolev).
- Other requests and proposals cover:
 - Eco-footprint – indicator for sustainable development;
 - Technology transfer from the JRC;
 - JRC to consider the idea to create wide interdisciplinary group for research the origins of climate change, prediction of hazards, also with regards to the Black Sea region.

2. Round Table B on GMOs in Food, Metrology

- There is a clear need for amendments in Bulgarian GMO law, since there are still discrepancies with the EU legislative framework; therefore participants called on support from the JRC with the implementation of the EU GMO legislation.
- Risk –assessment and efficient laboratory control were noted as areas to further explore. For the former, ensure close collaboration with EFSA to avoid duplication of work. For the latter, ISO 17025 accreditation, as specified in Regulation (EC) No 882/2004, should be prioritised.
- National reference laboratories have to be appointed, so the work and responsibilities can be streamlined. Likewise, it is important that appointed NRLs actively participate in activities of the CRL/NRL consortia, particularly so in the proficiency tests.
- The membership in the European Network of GMO Laboratories (ENGL) was requested specifically from non-EU countries in order to strengthen competence in the field of GMO detection and to harmonise the way of GMO detection and the interpretation of results.
- Training activities to be conducted on national, regional and European level.
- International cooperation and experience exchange in the area of metrology was also underlined as essential by the speakers.
- Equipment: Lack of equipment is sometimes a problem. It should be explored how sharing of equipment to maximise the degree of utilisation might be intensified. Likewise, if Bulgaria is interested in second-hand equipment from other Member States, the possibility of this could be explored.

3. Round Table C on Nuclear Safety and Security

- Possible areas for further discussion of collaboration with the NPP Safety analysis laboratory of INRNE-BAS were identified as:
 - Severe accident management analysis using ASTEC, MELCOR and RELAP/SCDAP for VVER 1000 or/and for experiments;
 - Severe accident phenomena investigation using JRC experiments;
 - Supporting of SAMG and EOPs for VVER.
- Possible areas for further discussion of collaboration with the Reactor Physics Laboratory, INRNE-BAS were identified as:

- Knowledge management, specifically knowledge preservation in neutron/ gamma transport modelling; PLIM (Plant Lifetime management) regards to the neutron exposure; and core and spent fuel facilities nuclear safety analysis;
 - Improvement of reactor dosimetry for PLIM; spent fuel safety analysis;
 - Topics related to the Generation IV reactor systems: reactor core analysis and reactor dosimetry;
 - Nuclear security;
 - Enlarge the NULIFE with financial support to INRNE-BAS.
- Explore collaboration possibilities between the Neutron Data Laboratory, INRNE-BAS and the JRC IRMM (Neutron Physics Unit) on measurements and evaluation of neutron cross sections for nuclei important for nuclear safety Th-232 for uranium thorium fuel cycle, Cd, Hf for shielding and design.
 - Possible areas for further discussion of collaboration with the Radioanalytical Methods Laboratory, INRNE-BAS were identified as: metrology esp. interlaboratory analytical comparisons; nuclear security; and radioactive waste.
 - Possible areas for further discussion of collaboration with the Technical university of Sofia were identified as:
 - Education and training in different areas, codes and projects in nuclear safety and security;
 - Probabilistic analysis of nuclear safety;
 - Dissemination of JRC results on the different level of competence.

4. Collaboration instruments

The following instruments were mentioned at the closing of the Round Table as possible means for putting into practice the collaboration ideas:

- Extension of JRC networks to cover needs of New Member States, incl. Bulgarian partners.
- Visiting staff at the JRC Institutes selected via open calls published on the JRC and Institutes' websites.
- Workshops and Training Courses on scientific and technical topics of EU legislation.
- Support for short-visits for senior staff.
- Memoranda of Understanding (MoU) and Collaboration Agreements to consolidate and guide ongoing collaborations are to be set up between the JRC and research institutions in Bulgaria.
- Possibility to request access to large infrastructures and user laboratories for researches.
- Possibilities for collaboration – national detached experts, PhD and post docs, training and job opportunities.

5. Contacts

The participants were encouraged to use the several existing channels of communication with the JRC:

- By contacting the Bulgarian National Contact Point (NCP), Ms Diana Peeva.
- By contacting the JRC Headquarter in Brussels, and more precisely the Customer and Stakeholder Relations Unit.
- Or directly by contacting the relevant JRC Institute and Action Leader if it is known to them.