

**Slovenian-German Co-operation  
In Science and Research  
Protocol of a Working Session  
»Nanotechnology«**

**Ljubljana, 2 July 2002  
Ministry of Education, Science and Sport of the RS**

A Slovenian-German working session on Nanotechnology was held from July 1-3, 2002 in Ljubljana, following a new format of bilateral co-operation agreed upon at the last meeting from May 9-10, 2001 in Bonn. The objective of this meeting was to identify complementary potentials in a dynamic field of scientific and technological development especially with regard to FP 6. Other bilateral issues were discussed in parallel to the expert meeting.

An important objective of the working sessions between Slovenia and Germany remains the constant strengthening of bilateral means for deeper and more efficient co-operation on a European level.

Dr. Niko Herakovič, State Undersecretary and Chair of the Sector for International Scientific Co-operation in the Ministry of Education, Science and Sport of the Republic of Slovenia (MESS) took the lead on the Slovenian side, Ministerialraetin Irene Ruede, Head of Division Co-operation with Middle-, East and Southeast European Countries, Federal Ministry of Education and Research (BMBF) on the German side.

The agenda of the session is added as attachment 1.  
A list of participants can be found in the attachments 2 and 3.  
The experts conclusions are annexed as attachment 4.  
A common call for bilateral projects is added as attachment 5.

Dr. Herakovič welcomed the German participants to Ljubljana. He referred briefly to the last working session and the very positive relations between both partners.

Ms. Ruede returned the words of welcome.

Both sides provided an overview on the present situation concerning policy developments in science and research in general. They also presented new instruments of bilateral co-operation in an European context.

Both sides also presented some ideas about the possibilities of future bilateral scientific co-operation in the field of "Nanotechnology", which were elaborated by representatives of the ministries and scientists of both countries.

A Slovenian-German Co-operation Day organised by the Federation of Industrial Research (AiF) took place on June 18, 2002 in Ljubljana. Dr. Heinrichs gave a short report.

In the frame of the working session the delegation of the scientific experts held a separate session (a workshop) named "Nanostructures in Optoelectronic and Ultra-thin functional layers", consisted of the presentations of each scientist. In the plenary discussion of the workshop Slovene and German participants of the working session prepared the conclusions, added in the attachment 4.

Both sides discussed the expert's conclusions and agreed to work on a survey until the next working session as source of general and more specific information on Nanotechnology potentials in both countries. Among other suggestions was stressed the possibility of Slovenian scientists participating in thematic courses or annual meetings of German Centres of Competence (CC Nano), and also participating in several Networks of Excellence on a European level in the field of "Nanotechnologies".

Bilateral STC issues were discussed in parallel. Both sides discussed ways, instrument and means to strengthen bilateral co-operation between the two countries such as expert meetings, fact finding missions, workshops, conferences, and seminars, to explore complementary potentials in fields of common interest and to identify new bilateral or regional projects also under EU programs such as FP 6 or other multilateral programs.

Both sides agreed upon core elements of a new call for proposals, concerning common fields of interest, criteria and instruments, which will be launched at the latest by the beginning of August 2002, with a deadline for submission on October 10, 2002. The call for proposals can be found in the attachment 5. The selection procedure should be finished by 2002.

### **Fields of common interest**

- Nanotechnologies, intelligent materials and new production processes and other innovative physical and chemical technologies leading to wide technical and commercial utilization
- Information and communication technologies
- Life Sciences/ Genomics, Biotechnolog for health
- Sustainable development and global change
- other promising fields (depending on the total number of applications received)

### **Criteria**

- Relevance to German and Slovenian national and/or European funding programmes
- Preparation of new projects / Promising results for further bilateral co-operation
- Quality and originality of research approach
- Multilateral networking (EU and International Programmes)
- Qualification of applicant
- Support of young scientists
- Commercial usability or other utilization potential / Practical use
- Mutual benefits and Common interest

## **Instruments**

- Expert meetings to explore potentials of co-operation
- Preparatory projects (joint research projects) for future joint R&D-projects, preferably under national programmes, the Specific Programmes of FP6 or other European programmes
- Workshops, Conferences, Seminars, Brokerage events, Training courses
- Counselling missions / Consultancy projects

## **Duration**

- According to format

A call for proposals should be announced each year and should be based on a specific topic.

Among other bilateral S&T projects, a “pilot” project on a broader basis, using the financial possibilities of EUREKA or other integrated sources, could be carried out in the next mid-term period.

The two sides also discussed a suggestion of a »summer school«, conducted on a specific topic – as a priority field actually on the topic of Nanotechnology. It was proposed that the summer school should be realised before the end of 2002, with the possibility of evaluating and deciding on projects on that occasion.

As far as bilateral co-operation in ICT is concerned, initiated at the last working session in May 2001, Bonn, Prof. Encarnacao will summarise common activities, so as to make a short evaluation. The cooperating scientists will work out a precise matrix, which will be later published on the internet.

Among other suggestions, the Slovenian side expressed willingness to cooperate with Germany and also with other EU-member countries in establishing contacts and S&T cooperation with the countries of former Yugoslavia. As a member of the former Federative Republic of Yugoslavia and as an accession country to the EU at present, Slovenia has many advantages in knowing the general situation and culture in the countries of former Yugoslavia as well as in the EU and is therefore ready to serve as a bridge between western European countries and the countries of former Yugoslavia. The German side expressed great interest in such a type of cooperation in order to encourage the democratisation process and stability in this part of Europe and integration of those countries into EU research activities.

The idea of a common institute of the two countries, Slovenia and Germany, was discussed. A possible structure will be defined in more detail in a document, to be issued by the German side.

The visits of Jozef Stefan Institute, The Institute of Metals and technology, The National Institute of Chemistry Slovenia and the Nova Gorica Polytechnic were especially fruitful. Some concrete actions were proposed by the participating

scientist, including cooperation in the form of special summer schools etc. , integration of German students into the study programmes (e.g. via the German "Go East"-initiative). The Nova Gorica Polytechnic will work out a specific plan for bilateral cooperation between competent institutions.

There was a common understanding to arrange for periodic working meetings, where special target points of bilateral interest and the perspectives of the bilateral co-operation shall be discussed.

The German side invites the Slovenian side to Germany for the next Working Session in summer/autumn 2003.

This protocol is done in English in two copies.

For the Slovene side

For the German side

Dr. Niko Herakovič

Irene Rüde

Ministry of Education, Science  
and Sport

Federal Ministry of  
Education and Research