

## **Conclusions of the CZEDER 9 Conference**

The ninth annual national conference, "Czech Days for European Research" (CZEDER9, Prague, October 26-27, 2011), focused on three topical areas: (i) the current state of preparations for the next framework programme of the EU for research and innovation (i.e. the HORIZON 2020 programme), (ii) the issue of excellence in European research, and (iii) the participation of industry in FP7. An accompanying workshop was dedicated to cooperation with third countries. In contrast to all previous years, organisers omitted the report on the CR's participation in the current framework programme; however, a detailed report was available to participants in the form of an attachment to the ECHO 4-5/2011 journal.

(i) R. Lečbychová from the European Commission presented to the participants not only the current state of preparations for the Horizon 2020 **programme** but also other initiatives proposed within the European Research Area for the period of 2014–2020. Horizon 2020 is supposed to stand on three pillars (optimum thematic range for solving "grand challenges", strengthening competitiveness of industry and increasing excellence of the scientific base). The proposed thematic orientation of the Horizon 2020 programme (H 2020) on six areas that are expected to bring about solutions to "grand challenges" does not differ too much from issues investigated during the current FP7. However, a significant difference lies in the fact that H 2020 is supposed lead to an increase in the competitiveness of European industry. This places a great demand on the flexibility of national industrial research which should direct a part of its capacity to activities oriented at increasing the enabling technologies without which it will be hard to achieve the necessary progress in solving grand challenges. It is apparent that there has been a rapid growth in the responsibilities of European organisations (technological platforms, joint technological initiatives, European Commission bodies etc.) that formulate stimuli for such changes in orientation. A just economic competition must be based on clear rules that ensure equal chances for access to European risk funding. The final document should be submitted for discussion to the European industry as soon as possible.

Joint programming based on initiatives of member states will be intensively developed in the next funding period in the European Research Area.

(ii) The discussion oriented at the strengthening of excellence was not related solely to ERC projects. Instead, it reflected the fact that the emphasis on excellence is in place not only on the national level but also on the level of the entire European Research Area. European research is based mainly on the collaboration of institutions from different member states. A concept called "collaborative excellence" was introduced and posed for discussion; it quantifies participation of the excellent European institutions in the international consortia solving the FP projects. It was shown that the Czech Republic should still increase its rather low participation in the FP, however, it has guite high participation in projects solved by consortia comprising the excellent European research institutions. The discussion further focused on the hitherto low participation of the CR in ERC projects that are based solely on excellence. Still, Czech institutions place an emphasis on excellence as well: while the ASCR internally places a great emphasis on excellence (several measures stimulating excellence are implemented within the ASCR), Charles University asks to what degree the excessive orientation on excellence finds itself in conflict with the basic, i.e. educational, role of the university.

Another important topic discussed was the issue of linking the structural funds with the funding of H 2020 projects. The question is whether the H 2020 will not only allow such link but also actively support it via introducing using a suitable class of projects.

(iii) Discussion on the participation of industry in the Framework

Programme: The midterm evaluation of the FP7, prepared by the EC in 2010, pointed out the declining participation of the European industry. Nevertheless, it is a fact that compared to previous FPs, the range of industrial activities receiving funding from FP7 has grown. The Czech industry has had a number of success stories in FP6 and FP7. One example is the participation of the Aerospace Research and Test Establishment in European aerospace research projects.

Factors were discussed that make the Aerospace Research and Test Establishment one of the most successful participants in FP6 and FP7 in the long-

term. Unquestionable successes also include the way the Czech industry uses extraordinary circumstances to participate in the globally important ITER project. The discussion also focused on experiences with participation in the ARTEMIS and ENIAC common enterprises that require a high ratio of national funding. The CR is probably achieving better participation in this area than in big integrated projects. Lastly, experiences of the TESCAN company, which invests around 40% of its gross revenue in research and has its products installed all over the world, were discussed. The company has long been successful in FPs, which enable it to pursue highly valuable international cooperation with top foreign institutions and further increase its research and development budget.

It can be said that the Czech industry has been successful in FPs so far. The connection between the industry and external research teams cannot work without finding a common ground, one where the research team is interested in the idea and its further development, and the industry is, by necessity, interested in profit – just like on the national level. If the industry is to contribute efficiently to the investigation of grand challenges, it is necessary to have timely information about the proposed allocations of European funds. The discussion has also shown that R&D institutions should build their own strategies for connecting to international research cooperation efforts. These strategies should be then reflected in the preparations of the CR's positions and opinions and promoted in appropriate work groups and committees on the European level.