31th Conference of Rectors and Presidents of European Universities of Technology: Istanbul, 21st-22nd September 2012

Introduction to the 2012 Conference theme

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Dear Rector Karaca, dear delegates, dear colleagues, ladies and gentlemen,

- I am delighted to welcome you at the 31st conference.
- First, I would like to thank Rector Karaca and Istanbul Technical University for hosting the conference. We were invited already some years ago by your predecessor Prof. Muhammed Sahin with whom we had an excellent cooperation.
- I thank you, Rector Karaca, for accepting the role of the host already in the first days of your rectorate and for ensuring that the preparations went on smoothly and so we can be here today.
- However, I may ask you to convey to Prof. Sahin our best regards and also our thanks for the excellent cooperation in the context of this Conference but more importantly also in CESAER, the Conference of European Schools of Advanced Engineering Education and Research. We very much hope and we look forward that ITU under your leadership, Rector Karaca, will continue its active role in European cooperation also in the future.

Dear colleagues,

• Istanbul Technical University hosted the Conference already once ten year ago on 26-27 September 2002. The topic was "Perspectives for universities in the ERA and in the 6th Framework Programme".

- 10 years later, today's topic is "Horizon 2020 New Opportunities for Universities of technology".
- The EU Framework Programme is the largest competitive transnational programme worldwide. In recent years, national impact assessments and assessments of the overall long-term impact of the FP were carried - some most prominently especially by Technopolis and Eric Arnold in particular - show the importance of the FP and also its high quality providing well founded evidence against to the myth of the FP as low quality research.
- Just to quote from a talk by Eric Arnold recently given in Vienna:
 - "The FP funds high-quality R&D: the evaluation and selection system is top quality and appraisal is tough; competition is fierce; participants perform better than non-participants in bibliometric terms; and they include the scientific elite; the FP attracts the best researchers (not all) that are also the best in national funding schemes."
 - "There is a clear correlation between the growth of the FP and the growth in high-quality international co-publication within Europe."
 - "Just as the FP attracts the more excellent researchers in their fields, so it engages the more research-intensive companies within their respective branches".
- Horizon 2020 will be the major financial instrument supporting the Europe 2020 strategy and the Innovation Union in particular.

Why having a conference of UNIVERSITIES of TECHNOLOGY?

- Universities of Technology play an important role in the Framework Programme. I would even say that they are the strongest part of the academic backbone of European Research Area.
- On Monday this week, the Commission published the Fifth FP7
 Monitoring Report covering the period 2007-2011. There is an
 interesting list ranking the top 50 participant Higher Education
 Institutions in FP7 signed grant agreements for the period 2007-2011.
 About 40% of the universities are explicitly universities of technology,
 BUT if you would go into more details and consider also engineering

faculties of general universities the percentage would be well over 50%.

- However, universities of technology are also main beneficiaries of Structural Funds – especially with regard to research infrastructure and equipment but also for the development of human resources for research, entrepreneurship, working with industry and SMEs, regional partnering in networks and clusters, and also internationalisation.
- In the forthcoming programming period 2014-2020, synergies between Horizon 2020 and the R&D and innovation related parts of the Structural Funds will be of central importance supported by a Common Strategic Framework for Research and Innovation.
- In Romania, for example, I have seen fascinating evidence of synergies between national funding programmes, Structural Funds including PhD programmes funded through the European Social Fund, and the Framework Programme. But there are many excellent examples of such synergies in other countries too both old and new member states.
- Therefore, I am grateful that Wolfgang Burtscher and Wolfgang Streitenberger accepted our invitation. It will be very important that universities are aware of the opportunities offered by the two programmes and utilize them in a complementary and mutually enforcing way.
- Wolfgang Burtscher is the person in Directorate-General for Research and Innovation, European Commission, carrying the load of negotiating with the European Parliament and the Council preparing Horizon 2020.
- Wolfgang Streitenberger has a main role advising the Director General and the Commissioner for Regional Policy on the research and innovation related parts of the EU Cohesion Policy instruments.

INDUSTRY

 Based on the Europe 2020 strategy and the Innovation Union, Horizon 2020 and the Cohesion Policy instruments will have a strong focus not only on research but also on INNOVATION by covering the whole innovation value chain. This will need a new level of close cooperation between universities and industry.

- In past Framework Programmes, industry participation declined over the years. The objectives, structures and instruments of Horizon 2020 aim at providing new attractive spaces for industrial involvement in cooperation with academia but also for industry taking the lead in certain schemes and instruments.
- Therefore, I am really glad that Erkki Ormala followed my invitation. Erkki has a long track record in national, European and international R&D&I policy, strategy and also programmes, both in shaping and evaluation. He is a key expert in all aspects of the FP and has e.g. chaired the Five-Year Assessment of EU Research Framework Programmes 1997-2003. Having been with NOKIA at the top R&D policy level in industry for many years he will certainly convey important views from industry on the new programmes which will be certainly interesting for you.

UNIVERSITIES

What are some key challenges for universities in the context of our conference topic?

- The last two decades have seen major changes in the university world. More autonomy, more accountability, in many places financial constraints, but also expectations towards contributing to societal challenges and to economic and social prosperity.
- We have seen the emergence of the university as an institution and the gradual professionalisation of institutional management. A process which is still not completed and encompasses many challenges.
- Institutional management of universities will become even more important in the future. It will also play an essential role in defending and strengthening European competitiveness in all respects.
- This goes very much far beyond the focus of our conference. We will focus especially on the perspectives for the next period of European research and innovation 2014-2020.
- Universities' institutional management will face the challenge to develop appropriate institutional strategies for education, research and innovation.
- On the one hand, universities should take an active part contributing to the shaping of partnership contracts for capacity building including

development of research infrastructure, development of human resources for research, technology transfer, developing strategic partnerships, and working with industry and SMEs especially in networks and clusters at regional level. Climbing the "Stairway to excellence" ...

- On the other hand, universities should contribute to the realisation of national and European policy objectives by utilizing the Framework Programme for collaborative research and innovation and at the same time providing open spaces for curiosity driven research nurturing creativity and providing the basis for future breakthroughs. Coping with complex interdisciplinary problems connected with Societal Challenges will need finding new ways of getting organised across disciplinary silos and opening towards working with partners from the "real world" also beyond industry.
- As a case study, Rector Mehmet Karaca will present the role of the Framework Programme in ITU's strategy. Knowing that Turkey and ITU in particular is most actively involved in FP7 I am looking forward the evidence from one of the strongest academic institutions of this country.
- Karin Markides will prepare the ground for tomorrow's presentations and deliberations by discussing the importance of realising the Knowledge Triangle and the role of the universities as partners for solving complex problems. Karin Markides is best suited to guide us through these issues due to her her experience as President and CEO of Chalmers University of Technology and her in-depth European and international experience as the past President of CESAER.
- So, today, we will have ITU as a concrete of university strategy and the general introduction of different issues relevant for tomorrow's discussion.

Already now, I would like to thank all speakers from tomorrow for their preparedness to share with us their experiences with past FPs, the underlying strategies and also the prospects for Horizon 2020.

As the ranking in the new Monitoring Report shows, we are all competitors but at the same time the FP has also taught us the benefits and strengths of collaborative research and innovation.

Europe is at a crossroad and in the next years we will see hours of truths and it may well be that the 2014-2020 period will be a (some people say the last) window of opportunity for positioning Europe as a strong actor in the world. As recent reports by the Royal Society and the OECD show, collaboration and coordination in a global competitive environment will be of utmost importance using all our resources in the best possible way to keep our place in the world. Universities of technology together with industry and other social actors will have an important role to play in these processes. ICT will play a more and more important role for creating virtual research centres and strengthening invisible colleges and other new forms of doing science and research and innovation. But personal contacts will stay as a major precondition for all these developments.

Therefore, our conference has been organised for now already over 30 years providing structured and open parts for exchange of information, mutual learning, deepening partnerships and establishing new contacts – including friendships - across Europe. Thus, we hope that the Conference is also contributing to the widening of participation in European research and innovation activities and the completion of the European Research Area.

Thank you for your attention!