OECD HIGH-LEVEL EVENT ON THE KNOWLEDGE TRIANGLE: ENHANCING THE CONTRIBUTIONS OF HIGHER EDUCATION AND RESEARCH INSTITUTIONS TO INNOVATION

CONCLUDING REMARKS

by Secretary General Alf Rasmussen, Norwegian Association of Higher Education Institutions

Dear colleagues,

In 2013, the Norwegian Association of Higher Education Institutions (UHR) developed a framework for how our member institutions can work with research, education and innovation in a more interconnected way. We realised that these three core activities to a large degree had been treated separately, not only on the operative department level, but also in the institutional strategies and in how the institutions where organised. A typical institution had one vice rector for teaching, one for research and may be one for innovation. The central administration had one teaching department and one research department and may be a section dealing with innovation (-policies). Furthermore, this "trinity" where copied throughout the institution, maintained the three activities in their own "silos", with more connection vertically within the same activity, and with less connection between research, teaching and innovation on the different levels.

Inspired by the policy concept of the Knowledge Triangle, widely used by the European Union as a basis for their research and innovation policies, we set out to develop a framework for how to improve the *connections* between the three corners in the triangle. Our drive for excellence in each of the three knowledge triangle dimensions cannot be successful without "help" from the other two. The way forward was to promote activities that could strengthen "the connection between the dots"; - concrete actions linked to the three sides of the triangle.

This perspective was the basis for the Norwegian initiative to suggest an OECD Knowledge Triangle Project. OECD - as an influential *agenda setting institution*, an arena for *mutual learning and best practice*, and not least a key global actor in *collecting, connecting and disseminating facts and figures* on complex questions. We are very pleased that OECD accepted to undertake the project, and that so many countries share our interest in working with these topics.

The many national reports that have been already delivered, the draft synthesis-report and the presentations and discussions during these two days have made us quite confident. By completion of the project by the end of this year, we will be able to deliver a clearer understanding of how we can use the knowledge triangle concept within our institutions, in our government's policies and in our common efforts to promote the knowledge society globally in search for better societies.

What have we found out?

Results from the reports so far tells us that to improve the Knowledge Triangle, there is not one, but a combination of policies and practices, that matter. We have seen that:

- Funding mechanisms matter
- Recruitment and career policies matter
- The institutional set-up matter
- Governance and leadership matter
- Sectoral policies matter
- Scientific fields matter
- Industry and public sector's involvement in research and teaching programs matter - and
- Which indicators and the way institutions have to report to their government matter.

The three sides of the triangle

Education – Innovation

If we focus on each of the three sides of the triangle, recommendations to **link Education and Innovation** could be to create arenas for dialogue between HEIs and employers regarding education, for instance through:

- Involving future employers in developing forward looking curricula, or
- Create platforms for BA or MA theses that meet the needs of private or public institutions, or
- Systematic involvement of public and private sector in educational programs.

To promote entrepreneurship among students is also essential. I think, entrepreneurship perspectives could be embedded *in all educations*. Another measure may be to:

- Establish BA and MA in entrepreneurship, - and not only in technical fields.

Research - Innovation

Some key recommendations to **link Research and Innovation**, could be,

Firstly to see excellent research as a basis for problem solving, for instance through:

- Promoting high ranked academic staff's participation in public policy development (white papers, evaluations of public policies, etc). and to
- Develop awareness and instruments to exploit innovation potential in excellent research.

Secondly, to establish a close and mutual cooperation between HEIs and society, for instance by including representatives from public and private partners in university, faculty and department boards, as well as promote professors and university leaders into boards of private companies.

Thirdly, we should promote transferable skills in research and research skills in private and public sector. Measures could be to promote recruitment of research educated staff in the expanding non-

academic knowledge sector (The future knowledge society needs more PhDs.), to remove thresholds for mobility between academic and non-academic sector and to recruit academic personnel with innovation skills and competence.

We should also remember that Innovation often happens in spaces between disciplines, research areas and sectors. We should therefore:

- Organise financial and structural mechanisms for multi-/cross disciplinary research, and
- Promote research projects that link excellent researchers with public and private partners.

Research – Education

Regarding actions to link **Research and Education**, the obvious key to good results, is research based teaching! On relatively easy, but sometimes underestimated measure, is simply to let new students meet the best researchers, both from your own institution and those that comes visiting! Furthermore, programs to involve students in research projects should be more widely used. The latest technology also gives very interesting new possibilities to give students also at lower levels insights into frontier research. Last, but not least, Institutions and governments should remove any thresholds between frontier research and teaching. Our students deserve to be exposed to and challenged by excellent research.

Synthesis report

We have not seen the final version of the synthesis-report. When this is presented as the project closes by the end of the year, we hope that one of its deliverables is a well-founded set of key recommendations, - targeted to *the institutions*, to *the governments* and to actors at the supranational level such as *the OECD itself and the EU*.

To sum up based of the findings so far, I do have my own short-list of recommendations and their addressees:

Key recommendation for the:

- ➢ Institutions is to:
    - o Expose and involve industry and public sector in teaching and research
    - o Include innovation and education in recruitment and career policies – and to
    - o Ensure excellent researchers the flexibility to take part in education and engage with public and private sector.

- ➢ Key recommendations for the Governments is to:
    - o Implement KT-perspective in funding schemes and reporting
    - o Evaluate their rules and regulations to remove any obstacles to KT-activities.

- ➢ And to the OECD the recommendation will be to:
    - o Continue with developing facts and figures linking education, research and innovation
    - o Continue to develop knowledge based policy tools/recommendation for Knowledge Triangle activities.

And with these words, I thank you very much for your attention!