Switzerland – an excellent partner for science and innovation

Speech by H.E. Bénédict de Cerjat, Ambassador of Switzerland in Poland,
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First of all I would like to thank Prof. Tajduś, Rector of the AGH University of Science and Technology, for his kind invitation to the conference.

I am pleased to be in Kraków, a venue which could not be better for a meeting of academics and scientists. As the cradle of modern science in Poland and Europe, Kraków brought up many famous researchers and scientists.

Today's conference is an excellent follow-up of last year's meeting at the Paul-Klee-Zentrum in Bern. Many of you did participate to the said conference when I spoke about the past, the present and the future of Swiss-Polish relations.

The title chosen for my speech today *"Switzerland – an excellent partner for science and innovation"* certainly needs some explanations since we are talking about crucial, but not necessarily self-explanatory words: excellence and partnership. The first is indeed an ambitious term - the latter a popular, but often meaningless expression. So, you might ask yourself: What can tiny Switzerland offer to the scientific world beside its well-known watches and machineries? How can Switzerland as a non-member of the European Union be an excellent partner?

Well, let me further elaborate on the rational behind the chosen title of my speech and therefore shed some light on Switzerland's importance in the world of science and innovation.

<u>World-class scientific and innovation performance</u>
OECD states in its latest Science, Technology and Industry Outlook that Swiss scientific and innovation performance is world-class. Expenses in Research and Development (R&D) represented 2.9% of GDP in 2004. With this figure, Switzerland is one of the countries with the highest R&D-expenditures worldwide.

Nevertheless, the Swiss government has increased public funding for 2008-2011 to more than CHF 20 billion to catch up with other countries such as Sweden, Finland, South Korea and Japan which are still spending a larger amount in R&D. Switzerland's research portfolio is highly specialised and puts its main focus on life sciences, physics and chemistry. It's furthermore strongly oriented towards universities and

basic research. Business expenditure on R&D accounts for over 70% of the total and are mainly dominated by multilateral companies.

Competitive economy and diversified High-Tech sector

Switzerland's highly competitive economy and it's diversified High-tech sector are two important factors for it's outstanding scientific performance. Talking about High-Tech in Switzerland means sectors such as engineering, electrical and metal industries with 318'000 employees, medical technology with 40'000 employees, the pharmaceutical sector with the two global players Novartis and Roche (more than 26'000 employees), bio tech with some 15'000 employees and further worth mentioning the chemical industries, computer sciences and last but not least the rapidly growing micro- and nanotechnologies. These sectors attract obviously the most of Switzerland's massive foreign investments.

Switzerland is home of many global and regional headquarters and R&D facilities of well-known companies such as Google, Hitachi, eBay or IBM. 9% of the total workforce in Switzerland work for foreign companies. Renowned Swiss companies such as Nestle, Holcim or SwissRe are important global market players in their respective sectors. This makes Switzerland a truly international business environment. Furthermore, the Swiss economy is rated as the most greenhouse gas efficient economy in the developed world by the Universities of Yale and Columbia in their Environmental Performance Index.

High investment in education

Among all OECD countries Switzerland's annual expenditure on educational institutions is the second highest, right after the United States. Switzerland has strong vocational and upper secondary professional schools, but a smaller, albeit well-financed, university sector with a small number of graduates by international standards. One particularity of Switzerland's higher education is its high share of PhD degrees relative to its population and more than a third (37%) are granted to women. Foreign students account for more than half of students enrolled in PhD programmes. This underlines the openness and internationality of Switzerland's higher education system.

Switzerland as a full partner in Europe

Although Switzerland is not a member of the European Union, it is fully integrated through a series of sectoral agreements. One of them covers scientific cooperation and research and development and gives Switzerland full access to the EU Framework Programmes for Research and Technological Development (FPs) as an associated country. In the current Programme FP7 (2007 – 2013) Switzerland contributes CHF 2.4 billion which equals 2.8% of the total amount of the programme. Since Switzerland's participation in the programme in 2004, Swiss researchers turn to be highly successful. In FP6 (2003 – 2007) Switzerland's research community has been benefited with CHF 793 million or 3.1% of the total. Meanwhile the Swiss Contribution was slightly lower – CHF 780 million which proofs the competitiveness of Swiss researchers - especially in the field of Information technology, life science/health and nanotechnology where they participated the most.

Researchers appreciate the access to additional funding and consider it as a decisive factor when it comes to their participation. Similarly, the motivation for participating in the Framework Programmes is driven by the search for new scientific and technical approaches to solutions, as well as the acquisition of new knowledge.

Switzerland is also represented in several other European programmes such as CERN or ESA to name the most important.

Switzerland as a partner for Poland

Let me now turn to Poland and elaborate more on the partnership between Poland and Switzerland in science and culture which is the focus of today's conference.

Scientific relations between Poland and Switzerland have been always close. Polish scientists, such as Gabriel Narutowicz who actively contributed to the modernization of Switzerland by building hydroelectric plants as an engineer - later professor at the Federal Institute of Technology (ETH) in Zurich, or Ignacy Móscicki who did some truly pioneering work as a chemist at the University of Fribourg, played an important role among Switzerlands' academics at the beginning of the 20th century. Both, Móscicki and Narutowicz, are emblematic for the intense relations between Poland and Switzerland. It was a relationship based on science and politics.

As you certainly know, following the positive outcome of a referendum in 2006, Switzerland has started to set-up a programme which supports the 10 new EU Member States with CHF 1 billion over the next 5 years. Poland - as the biggest of them - will benefit the most of the so called Swiss Contribution (almost 50% will flow to Poland). The programme sets one of its 5 priorities in Human and Social Development - in particular on Research and Development. CHF 18 million is dedicated for supporting joint research projects between Polish and Swiss institutes. The Polish government will contribute at least 15% in addition to this amount. All projects should contribute substantially to the knowledge based economy in both countries through the enhancement of the knowledge base - with a particular focus on research as well as know-how and technology transfer. Furthermore, there is another CHF 12 million reserved for scholarship programmes.

Mr. Dominique Favre, Deputy Head of the Swiss Contribution Office will certainly give you some more details on the planned programme in his presentation tomorrow morning.

The Swiss Contribution is indeed a unique opportunity to not only deepen the existing cooperation but also develop new activities in additional scientific fields. It will hopefully boost Polish-Swiss research. I am very optimistic that this particular part of the Swiss contribution dedicated to R&D will bring the highest mutual benefits to our two countries. From a financial point of view, it might not be the most important element of the Swiss Contribution, but as it strongly builds on brainpower, it is a substantial investment which will bear its fruits in the future. One thing is out of question: It will certainly further deepen the already excellent bilateral relations between Poland and Switzerland.