

Excellencies, Distinguished Delegates, Ladies and Gentlemen,

I have the good fortune to be a research physicist at CERN, and the honour and privilege to be a member of the Scientific Advisory Board to the UN Secretary-General. I would therefore like to say a few words in the context of both.

I had the opportunity to start to work at CERN when I was an undergraduate student. I therefore grew up, so to speak, in a unique place, where I have been breathing the passion for fundamental knowledge. And knowledge, together with art, is among the strongest needs and highest intellectual expressions of human beings. I grew up in a place where the quest for knowledge stimulates curiosity, creativity and ingenuity, and also requires the development of innovative, cutting-edge technologies, which are transferred to society to the benefit of everyday life. Unprecedented instruments developed at CERN during the past 60 years have found application in a variety of fields, including medical imaging, tumor treatment, solar panels, food sterilization, big data, not to mention the world wide web. I grew up in a place that celebrates mankind's diversity as a gift and richness, where the universal language and unifying goals of science bring more than 10000 people of 100 nationalities to work peacefully together, and where scientific education has a central role.

CERN's successful history, including the recent groundbreaking discovery of the Higgs boson, demonstrates the ability of science and technology to address big challenges, analyze and tackle complex problems, and attract intellectual resources from all around the globe. It also demonstrates the crucial role of continued support from Member State governments. Sustainable development also presents big challenges and complex problems, and it also requires worldwide cooperation and governmental support.

The creation of the Scientific Advisory Board, which brings together 26 scientists from various disciplines, recognizes the central role of science for sustainable development. The mandate of the SAB is to provide advice to the UN Secretary-General and Executive Heads of the relevant UN organizations on science, technology and innovation for sustainable development, to strengthen the linkage between science, policy and society, and to ensure that the latest scientific findings are reflected in high-level policy discussions within the UN system.

In a document presented at the meeting of the High Level Political Forum on Sustainable Development, organized under the auspices of ECOSOC in July 2014, the SAB provided preliminary reflection and comments on "The Crucial Role of Science for Sustainable De-

velopment and the Post-2015 Development Agenda”. Here I would like to mention a couple of recommendations, particularly relevant to today’s interactive discussion:

“Recommendation 1: The SAB calls on the UN Secretary-General and the international community as a whole to integrate science into the post-2015 development agenda by acknowledging its significant role for poverty eradication and sustainable development ...”

“Recommendation 2: The international community should aim at establishing national minimum target investments for science, technology and innovation, including special allotments for the promotion of basic science and science education and literacy.”

Basic science is the foundation of future innovation. For instance, without knowledge of quantum mechanics transistors would not exist, and without knowledge of relativity the GPS in airplanes would not work. However, usually the highly transformational breakthroughs arising from advances in fundamental knowledge require time and patience. Quantum mechanics and relativity were discoveries of the early 1900. On the other hand, private investments target mainly applied research projects that give returns in the shorter term. Public investments also favour projects yielding results within the political term of government leaders. Therefore, how can we make sure that basic science receives adequate, sustained funding, transcending the specific interests of the private sector and the change of governments? How can we best use the power of science for sustainable economic growth, for reducing societal inequalities and for resolving today’s global challenges (poverty, health, food, energy, climate change, etc.)? How can we strengthen the dialogue among science, politics and diplomacy in order to successfully address such big issues? These are some of the questions that I hope will be debated in the interactive discussion.

Let me conclude by saying that, as CERN’s successful history demonstrates, science promotes and produces knowledge, development, education and peace. I feel these values did do not only make me a better scientist: they have also made me a better person.

Thank you very much for your attention.