CERN: SIXTY YEARS OF SCIENCE FOR PEACE AND DEVELOPMENT
Celebrating CERN’s 60th anniversary


Author: Maurizio Bona
Editor: Anaïs Schaeffer
Foreword

“

We are celebrating 60 years of science for peace and development, and where better to do so than at the United Nations? CERN and the United Nations share common origins: both emerged from the ashes of the Second World War. While the United Nations was founded in 1945, it took a little longer and a small group of visionary scientists and diplomats to combine science and education to create, in physics language, a “resonance” that would change forever the way cross-border science is done. On 29 September 1954, that “resonance” became CERN, and I think it became a blueprint for a long-term international collaboration across cultural and national boundaries.

Introductory address by Rolf Heuer, CERN Director-General 2009-2015
Introduction

The European Organization for Nuclear Research (CERN) is the world’s leading laboratory for particle physics. In 2014, it celebrated its 60th anniversary with a series of events in Geneva, at the UNESCO Headquarters in Paris (where the CERN Convention was signed in 1953), and in its Member States. On 20 October 2014, the celebrations were brought to a close with a special high-level event at the United Nations (UN) Headquarters in New York, under the auspices of the President of the United Nations Economic and Social Council (ECOSOC), sealing the close relationship between CERN and the United Nations. This event was co-sponsored by the Permanent Missions to the United Nations of the two Host Countries of CERN, Switzerland and France (see the programme and the concept note of the event in the appendix to this document – page 14).

With this event, CERN triggered an open and constructive exchange of views between scientists, policy-makers and diplomats on a range of questions: Why should science play a more influential role in global debates? What would be the added value of better integrating science into strategies for the resolution of global issues? What should politicians and diplomats do to integrate science into decision-making processes? And how do CERN and other international laboratories contribute to peace and development?

Indeed, since its creation, in 1954, CERN has grown into a model for global scientific and technological collaboration, demonstrating how science can unite nations by bringing scientists together for the benefit of all.

During this meeting, speakers celebrated 60 years of CERN successes and highlighted the importance of putting science in its rightful place in order to address present and future global issues.
Science in its rightful place

Regrettably, the world of science is still not fully integrated into decision-making processes at either a national or a global level. Science is too often confined to the sidelines of debates on global issues. Its role and input are predominantly considered to be merely technical and may or may not be taken into account by decision-makers, depending on other considerations. However, this does not reflect the real nature of science, whose practical applications include alternative and renewable energies, agriculture and food security, climate change and health. For this reason, as Martin Sajdik, President of ECOSOC, recalled, although science is often associated with research and cutting-edge discoveries, its results also have an impact on peace and development.

Sebastiano Cardi, Chair of the Second Committee of the General Assembly of the UN, went on to highlight that, from climate change to disaster preparedness, from public health to food security, from the eradication of poverty to data revolution, science and scientists can offer solutions to global and common challenges and pave the way toward a most sustainable and innovative society. And what a more resounding example of the role of science than the one it plays in public health? Indeed, Naledi Pandor, Minister for Science and Technology of the Republic of South Africa, highlighted the crucial contribution of science in the treatment of diseases such as polio and smallpox, which have almost been eradicated as a result of the 20th century development of drugs and vaccines. Another hot topic for scientists and society is climate change. The representative of the World Meteorological Organization (WMO) reaffirmed that, today, climate change is the biggest threat to our planet, and that science and research provide the key to understanding the speed and effects of these changes.

“It is to science that we turn to, not only to politics, to address this existential crisis. It is to science that we turn to, to analyse the threats and find cures and solutions.”

Sebastiano Cardi, Chair of the Second Committee of the General Assembly of the UN

An answer to today’s challenges

If history has already proved how crucial science is for peace and development, today’s challenges show that a lot still needs to be done to improve the quality of life for people worldwide. Kofi Annan, Nobel Prize Laureate for Peace and former UN Secretary-General, recalled that we face enormous challenges in a world of plenty, where 1 in 9 people go to bed hungry every day. He recalled that more than 6 million children die each year from diseases we have long had the knowledge to prevent or treat. Unsustainable production and consumption patterns are putting tremendous pressure on our planet’s limited resources. Above all these challenges, he continued,
is the threat of climate change. Rising temperatures, changing rain patterns and extreme weather events present a clear and present danger to our food and water supplies, our health and our societies.

Kofi Annan called for a fundamental revision of how societies, economies and the environment are managed. He conceded, though, that delivering essential changes leading to improving the lives of people around the world would not be easy. It will require us to develop a long-term vision of our global community based on common values. It will require political and ethical leadership to realise this vision. It will also require us to harness science, innovation and technology through cooperative partnerships across countries and organisations. CERN is an example of how to do that, which Mr Annan applauded.

A work of collaboration
Science collaboration is absolutely vital for all countries. Rolf Heuer, CERN Director-General from 2009 to 2015, stressed the need of partnership between developed and developing countries. Everybody has to be on equal footing in order to develop science and society further, he declared. Martin Sajdik agreed: all stakeholders must endeavour to push the boundaries of science in furthering inclusive development. They must also continue to share knowledge, technology and scientific advancements so that no one will be left behind.

But this is not as easy as it sounds, and concrete steps have to be taken. As raised by the Permanent Representative of Liberia to the United Nations during the interactive discussion, more efforts are needed to include scientists from developing countries.

Naledi Pandor concurred with the Representative of Liberia on the important need to ensure that support is provided to developing countries, and particularly the least developed countries, ensuring they are able to get young people involved with science, technology and innovation. Of course, she continued, to get to that point, greater attention to higher education investment is needed on the African continent. African governments have to ensure that they invest in science, technology and innovation, that they provide support to students in higher education, and that the science sector is supported, so that it builds a robust ability to ensure that Africa can play its full role in enhancing research and development in the world.

“Together we must find new ways to unleash the energy, creativity and entrepreneurial spirit so critical to transforming research into practical solutions.”

Kofi Annan, Nobel Peace Prize Laureate and former UN Secretary-General

Sam Kutesa, President of the 69th General Assembly of the United Nations, conceded that science, technology, engineering and mathematics education is
receiving increasing focus in all countries, but he agreed with his colleagues on the fact that greater investments are needed to unleash the vast untapped human potential, especially in developing countries.

The importance and necessity of putting boys and girls on an equal footing in education in general, and science education in particular, was also discussed at the meeting. Ban Ki-moon, UN Secretary-General from 2011 to 2016, made a call for a greater effort to attract more women and girls to science and technology related fields. He said that unleashing women’s innovation potential must be a priority. The Permanent Representative of Colombia weighed in during the interactive discussion to also underline the importance of having equal education between boys and girls.

“Let me call on the young generation to bring their passion and creativity to this effort. The UN stands ready to work with you.”

Ban Ki-moon, UN Secretary-General 2011-2016

Of course, science will not be of any help if it does not reach the policymaking sphere. Kofi Annan explained that it is crucial to make sure that scientific information reaches policy makers and that it is integrated into decision-making processes. Decision-makers, for their part, have to ensure that policy choices are guided by independent and objective scientific evidence, not the other way around. Martin Sajdik added that the science-policy-society interface must be strengthened in order to ensure that scientific and engineering education, scientific research, technological development, and policy making combine to adequately respond to the needs of the society. The success of scientific strategies and policies will require a continuous dialogue between scientists, policy makers and society.
The Scientific Advisory Board of the UN Secretary-General

On 24 September 2013, the UN Secretary-General Ban Ki-moon announced the creation of the Scientific Advisory Board. This Board brings together leading scientists in an effort to influence and shape orientations at the multilateral level to advance sustainable development and poverty eradication worldwide. With this decision, the Secretary-General underlined the fact that decision-making processes have to be informed by scientific evidence and knowledge, and that international and transdisciplinary scientific collaboration is a prerequisite for reaching global sustainability. By bringing together the collective capacity of a broad range of scientific fields commonly associated with sustainability, with due regard to the social and ethical aspects of sustainable development, the Board endeavours to strengthen the interface between science, policy and society. As Ban Ki-moon explained: “I attach great importance to expanding the role of science in the work of the UN. This is one of the reasons why I have created a Scientific Advisory Board to advise me on the science policy interface.”

Fabiola Gianotti, CERN Director-General 2016-2020 and, at the time of the event, CERN senior scientist and member of the Scientific Advisory Board, emphasised the importance of this Board, which brings together 26 scientists from different disciplines and recognises the crucial role of science for sustainable development. The mandate of the Board, she insisted, is to ensure that the latest scientific findings are reflected in high-level policy discussion within the UN system.

CERN, 60 years of science for peace and development

On 1 July 1953, only a few years after the Second World War, the Convention for the establishment of CERN (originally ‘European Council for Nuclear Research’, now ‘European Organization for Nuclear Research’) was signed at the UNESCO Headquarters, in Paris, by 12 European countries: Belgium, Denmark, France, the Federal Republic of Germany, Greece, Italy, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and Yugoslavia. On 29 September 1954, this Convention entered into force.

Carlo Rubbia, Nobel Laureate for Physics and former CERN Director-General, recalled the vision that triggered the creation of CERN. He highlighted the fact that CERN had been created not only to promote pure and open science at a European scale through the construction of a world-class laboratory for nuclear and particle physics, but also to create, through science, trust and unity between people of different European countries, traditions and mentalities, between people who had fought each other. Kofi Annan added that, since its very beginning, CERN has brought
scientists and nations together to explore and understand the world around us, and that CERN is an inspiring model for inclusive and peaceful scientific collaboration.

**Convention for the Establishment of a European Organization for Nuclear Research (Article II: Purposes - 1)**

“The Organization shall provide for collaboration among European States in nuclear research of a pure scientific and fundamental character... The Organization shall have no concern with work for military requirements and the results of its experimental and theoretical work shall be published or otherwise made generally available.”

“There are ideas that have completely changed the course of history, CERN was one of these. The message brought by CERN has never been as timely as it is now. It brings UNESCO and CERN together; this has a beautiful future.”

_Irina Bokova, Director-General of UNESCO_

(Ms Bokova, who could not attend the event, sent a video message to all the participants recalling the role played by UNESCO in the "birth" of CERN and congratulating the Organization for its successful evolution.)

60 years on, CERN has remained true to those ideals. Today, the Organization has 22 Member States (21 at the time of the event) and more than 3,000 staff members, scientific associates and students, as well as about 12,000 scientific users from 100 countries across all continents. CERN is one of the world’s largest and most complex scientific institutions, studying the fundamental constituents of matter. But above all, as the President of ECOSOC Martin Sajdik underlined, it is about women and men cooperating to build a more just and equitable world.

**Education and outreach activities**

Through its Teachers and Students Programmes, accessible to participants from around the world, including developing countries, CERN wants to promote and support education, in particular in particle physics. These programmes facilitate the exchange of knowledge and experience among teachers and students of different nationalities, and help CERN establish closer links with schools all around the world.

As Hitoshi Murayama, Director of the Kavli Institute for the Physics and Mathematics of the Universe, University of Tokyo, and professor at the University of California, Berkeley, explained, these students and teachers witness people from all over the world working together peacefully to solve the most profound mysteries of the Universe. They bring their stories back to classrooms and beyond. Put simply, they get excited and this excitement is contagious.
In Africa, the CERN-UNESCO Schools for Digital Libraries teach participants how to use digital library software and up-to-date information technologies to promote the global sharing of information. The Schools enable improved access to information for African researchers, and make African research more visible to the rest of the world. Also, since 2010, CERN supports the African School of Fundamental Physics and Applications, a training programme for African students with a university education in fundamental physics.

Nevertheless, as highlighted by the Permanent Representative of Liberia to the United Nations, more needs to be done, and Rolf Heuer admitted that these initiatives remain small droplets in a very large African continent. This is why CERN created the CERN & Society Foundation, an independent non-profit organisation pursuing general public benefit, which supports and promotes the dissemination, to the widest possible public, of the benefits of the mission of CERN, through education and outreach, innovation, and knowledge exchange, culture and arts.

**Achieving common goals together**

Fabiola Gianotti shared her experience and feelings about the Organization. She testified to the fact that CERN is a place where the quest for knowledge stimulates curiosity, creativity, and ingenuity, and requires the development of cutting-edge innovative technologies, which are transferred to society to the benefit of everyday life. She reminded that unprecedented instruments developed at CERN during the past 60 years have found applications in a variety of fields including medical imaging, tumour treatment, solar panel, food sterilisation, big data, not to mention the World Wide Web.

She went on to say that CERN is a unique place that celebrates mankind and treats diversity as a gift, where the universal language and the unifying goals of science attract more than ten thousand scientists, from a hundred different nationalities, from all over the world, to work together peacefully, attracted and motivated by the same passion for knowledge.

CERN is an excellent example of what people can do together and a strong source of inspiration, added François Delattre, Permanent Representative of France to the United Nations, because the most cutting-edge science is put at the service of all and gives opportunities to all talents at a time when, at the United Nations, people are working to create the post-2015 Development Agenda to share the fruits of progress in science with everyone.

Fabiola Gianotti concluded by saying that CERN’s successful history, including the discovery of the Higgs boson, demonstrates the ability of science and technology to address big challenges, to analyse and tackle big problems, and to attract intellectual resources from all over the world. It also demonstrates the crucial role of the continuous support of member state governments.
**A place at the UN General Assembly**

As the creation of the Scientific Advisory Board of the UN Secretary-General attests, the United Nations and its agencies are involved, in different ways, in many fields of science, technology and innovation, as well as in education, and both CERN and the UN are committed to promoting science as a driving element for society.

In that spirit, CERN was granted Observer status in the General Assembly in December 2012, a status that CERN is honoured to enjoy and that allows the Organization to strengthen and broaden its contribution to various ongoing UN initiatives.

Through this partnership, CERN is committed to sharing its expertise with the General Assembly, ECOSOC and other UN bodies, with a view to promoting the essential role of basic science and scientific education in the advancement of society, particularly in developing countries. An example is CERN’s contribution to the process of defining the post-2015 Development Agenda Goals, as part of which the Organization proposed that each country pledges a fixed percentage of its gross domestic product to science, technology, engineering and mathematics education.

“Our organisations share more than their origins, I think they also share their ideals. We both exist to promote peace and understanding among nations, with CERN choosing the universal language of science as its metier, and shared human curiosity, education and collaboration as its tools. It therefore seems natural to me that science should play a full part in the business of the United Nations and its agencies, and we will continue to work closer with them.”

*Rolf Heuer, CERN Director-General*

**SESAME, following CERN’s path**

Built in a region where peaceful interactions between neighbouring countries remain a challenging goal, the Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) facility is strong evidence of a willingness to overcome the current difficulties in the name of, and for the sake of, science. The project, set up according to the CERN model and developed under the auspices of UNESCO, brings together partners from across the Middle East, namely Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, the Palestinian Authority and Turkey.

SESAME is a third-generation light source, whose research programme utilises intense synchrotron light for studies across a diverse range of research areas,
including the medical, material and environmental sciences. Following the example of CERN, SESAME attracts experts to study science in a peaceful environment, which mixes nationalities, religions and languages.

SESAME recalls the beginnings of CERN’s history, when previously conflicting countries decided to peacefully start a common scientific project. Thus, it is important for CERN to provide concrete support for the SESAME initiative and help make it a reality. In line with this, the two laboratories signed, in 2010, a collaboration protocol, which states that CERN will share its expertise, in particular for the magnet system.

As the region’s first international research centre, SESAME contributes to regional scientific, technical and economic development at a crucial stage in the history of the Middle East. It is a focal point for regional scientific collaboration and for cross-border networking.

“SESAME’s pioneers dreamt of a region that follows a similar trajectory to that of Western Europe from the 40’s to the present day. We must never lose sight of such dreams, independent of all the problems we have.”

Rolf Heuer, CERN Director-General

Science, a development vehicle for Africa

Naledi Pandor, Minister for Science and Technology of the Republic of South Africa, congratulated CERN for its immense value to humanity and insisted that such a facility should also be created in the developing world in order to ensure that all the intellectual energies of our societies are directed toward using science effectively for the promotion of peace and development. She also agreed on the fact that science collaboration is essential, because no country can grow and survive in isolation. The international nature of cooperation and innovation in science and technology is central to enhancing a country’s competitiveness, its economic development, its human capital development, as well as enhancing its technology transfer.

To illustrate her feelings, she gave the example of the Perimeter Institute, a Canada-based centre for scientific research, which supported the creation of mathematical institutes for post-graduate study in eight African countries. Each of these mathematical institutes is international in character, receiving students from all over the world and drawing young graduates together through academic collaboration.
She also mentioned the Square Kilometre Array project (SKA), the world's largest radio telescope and one of the most recent examples of science drawing nations together. Built in the desert regions of South Africa and Australia, SKA will contribute to a greater understanding of the Universe. Led by a global partnership of scientists and governments currently from 20 countries, including nine African countries, the SKA is the first-ever global scientific infrastructure to be built in Africa, which has led to renewed focus on research and innovation on the continent. Naledi Pandor emphasized that this is the kind of research that individual countries would not be able to undertake in isolation.

“For the first time in four decades, we are experiencing a brain gain in Africa as a result of the SKA project.”

Naledi Pandor, Minister for Science and Technology, Republic of South Africa
Conclusion: science will be part of the solution

By granting CERN Observer status in the General Assembly in 2012, the United Nations recognised CERN’s major role for peace and development, and reaffirmed its commitment to promoting science as a driving element for society.

Science offers many answers to common challenges and will play an important role in the definition of the post-2015 Development Agenda Goals and, more broadly, in the advancement towards a more peaceful and sustainable society.

But if science is an invaluable tool for providing solutions to global issues, the way science is done is also a solution in itself. Indeed, CERN’s model of international collaboration led to many successes over the last 60 years, including several Nobel prizes in physics - a model that should be emulated by others.

Afterword

“The world faces multiple crises, but this is also an era of opportunity, where great achievements are possible thanks to science, technology and innovation. To all the scientists and policy makers here today, I urge you to engage even more actively with us in building a world of peace, prosperity and dignity for all.”

Ban Ki-moon, UN Secretary-General
Appendix

CERN: SIXTY YEARS OF SCIENCE FOR PEACE AND DEVELOPMENT

The role of science and scientific intergovernmental organizations in bringing people and cultures together

20 October 2014, 10:00am to 11:40am (EDT)
Economic and Social Council Chamber, United Nations Headquarters - New York
live webcast: webtv.un.org

PROGRAMME

Opening by H.E. Mr Martin Sajdik, President of ECOSOC

INTRODUCTION

H. E. Mr Sam Kutesa, President of the 69th General Assembly of the United Nations
H. E. Mr Ban Ki-moon, UN Secretary-General
Addresses by the Permanent Representatives of CERN’s Host States: H.E. Mr. Paul Seger, Switzerland;
H.E. Mr. François Delattre, France
H. E. Professor Rolf Heuer, CERN Director-General

KEY NOTE SPEECHES

“Science for peace and development: an inspiring objective for international scientific cooperation after World War II”
Professor Carlo Rubbia, Nobel Physics Prize Laureate, Senator for Life of the Italian Republic, former CERN Director-General
H. E. Mr Kofi Annan, Nobel Peace Prize Laureate, Chair of the Kofi Annan Foundation, former UN Secretary-General

“Science for peace and development today and tomorrow”
Professor Hitoshi Murayama, Director of the Kavli Institute for the Physics and Mathematics of the Universe, University of Tokyo, and professor at the University of California, Berkeley
H. E. Ms Naledi Pandor, Minister for Science and Technology, Republic of South Africa

INTERACTIVE DISCUSSION

Introductory statement by Professor Fabiola Gianotti, CERN senior scientist and Member of the Scientific Advisory Board to the UN Secretary-General
Interactive discussion with the audience

ADDRESSES AND CONCLUDING REMARKS

Address by H. E. Mr Sebastiano Cardi, Chair of the Second Committee of the General Assembly of the United Nations
Message from the Director-General of UNESCO
Concluding remarks by H. E. Professor Rolf Heuer, CERN Director-General

Closing remarks by H.E. Mr. Martin Sajdik, President of ECOSOC
CERN: SIXTY YEARS OF SCIENCE FOR PEACE AND DEVELOPMENT

Celebrating CERN’s 60th anniversary
United Nations Headquarters, New York
20 October 2014

The European Organization for Nuclear Research (CERN) is the world’s leading laboratory for particle physics. It is celebrating its 60th anniversary with a series of events in Geneva, at the UNESCO headquarters in Paris, where the CERN Convention was signed, and in its Member States.

The Organization is pleased to announce that the celebrations will be brought to a close with a special high-level event at the United Nations Headquarters in New York, sealing the close relationship between CERN and the UN. The event will be held under the auspices of the President of the United Nations Economic and Social Council (ECOSOC), and will be co-sponsored by the Permanent Missions of France and Switzerland to the United Nations.

The event will consist of a series of speeches and an interactive discussion, using CERN as an example to highlight the role that science has played in peaceful collaboration, innovation and development, and to consider how this legacy can be used to address present and future global issues.

Featuring contributions from eminent politicians and scientists, the event will:
• celebrate the values promoted by science - neutrality, inclusion, and co-operation;
• highlight the role of science and scientific education in sustainable development;
• promote, through an open discussion between the fields of science and politics, the idea of better integrating science into global decision-making processes.

60 YEARS OF SCIENCE FOR PEACE AND DEVELOPMENT

CERN was established after the Second World War to give Europe an institution for basic research on particle physics that would promote scientific excellence and peace.

One of its founding fathers, French scientist and Nobel Laureate Louis de Broglie, said of its establishment:
“At the very time when we talk of uniting the peoples of Europe, our attention has turned to the question of developing this new international unit, a laboratory institution where it would be possible to carry out scientific work above and beyond the framework of the various nations taking part, as it were. Resulting from cooperation between a large number of European States, this body could be endowed with greater resources than those available to the national laboratories and could then embark upon tasks whose
magnitude and nature preclude them from being done by the latter on their own. It would serve as a means to coordinate research and the ensuing results, to compare the methods used and to adopt and carry out programmes of work with the collaboration of scientists from the various countries concerned.”

Since 1954, several important achievements have been made at CERN, some of which have been rewarded with the Nobel Prize in Physics. The initial vision of a scientific laboratory has grown into a model for global scientific and technological collaboration, demonstrating how science can unite nations by bringing scientists together for the benefit of all.

Moreover, developing scientific knowledge in an environment like CERN, rooted in a culture of collaboration and peace, plants in each young researcher the seed of a new idea of global citizenship for sustainable development.

**CELEBRATING WITH THE INTERNATIONAL COMMUNITY**

CERN wishes to celebrate its 60th anniversary by promoting dialogue between the world of research and that of politics and diplomacy.

To that end, this event will include interventions from eminent personalities representing science, diplomacy and politics, who will highlight the role of science in the sustainable development of society and peaceful international cooperation.

Under the chairmanship of the President of the United Nations Economic and Social Council (ECOSOC) and following an introduction by the CERN Director-General, the UN Secretary-General and the President of the 2nd Committee of the General Assembly of the United Nations, invited speakers from the scientific, political and diplomatic spheres will present their views on science’s role in peacefully uniting international communities whose sole aim is the advancement of knowledge. The President of the General Assembly of the United Nations will close the meeting with his testimony on the role of science for the peaceful and sustainable development of the society.

Some of the speakers will also describe CERN’s scientific objectives, how the Organization works and its key accomplishments as well as the shared values that have inspired many generations of researchers from all over the world. The event will demonstrate the deep commitment by CERN towards making an extensive and lasting contribution to peace and development, including through a science-based post-2015 development agenda.

The scientific community, and CERN in particular, offers governance and operational models that successfully manage complex scientific missions on which thousands of people from different cultures, nationalities and religions collaborate. Such models contribute to creating bridges between cultures and promoting exchanges between all countries, independent of their bilateral relations.

**WHAT ROLE CAN SCIENCE PLAY IN AN INCREASINGLY KNOWLEDGE-BASED SOCIETY?**

CERN is honored to enjoy Observer status in the General Assembly of the United Nations since December 2012. The decision to grant CERN this status demonstrates the importance that the United Nations attaches to science and its role in society. CERN is committed to sharing its expertise with the General Assembly, ECOSOC and other UN bodies, with a view to promoting the essential role of basic science and scientific education in the advancement of society, particularly in developing countries. An example is CERN’s contribution to the process of defining the post-2015 Sustainable Development Goals, as part of which the Organization proposed that each country pledge a fixed percentage of its GDP to science and to STEM education.

Regrettably, the world of science is still not fully integrated in decision-making processes at either a national or a global level. Science is too often confined to the sidelines of debates on global issues: its role and input are predominantly considered to be merely technical and may or may not be taken into account by decision-makers, depending on other considerations.

With this event, CERN, an advocate of scientific values, wishes to trigger an open and constructive exchange of views in order to hear from scientists and policy-makers on a range of questions: how can science play a more influential role in global debates? What should politics and diplomacy do to integrate science into decision-making processes? What would be the added value of better integrating science into strategies for the resolution of global issues?
The European Organization for Nuclear Research (www.cern.ch) is an intergovernmental organization whose headquarters and premises straddle the Swiss-French border near Geneva, Switzerland. It was founded 60 years ago by twelve European countries. Today, it has 21 Member States, which is expected to increase soon with the adhesion of a number of other European and non-European countries. The Organization’s yearly budget amounts to approximately US$ 1.1 billion. CERN’s personnel consists of about 2300 permanent staff and 1000 fellows, students and apprentices paid by CERN as well as more than 10,000 associates, representing about 100 different nationalities, who are funded by their home institutions based in approximately 75 different countries.

The CERN Convention explicitly prohibits any activity concerned with “…work for military requirements” and stipulates that the results of any theoretical or experimental work carried out at CERN be published or made generally available to the scientific community and the general public. CERN is also very active in promoting Open Access initiatives.

During its 60 years of life, CERN has carried out a number of scientific programmes that have made fundamental breakthroughs in particle physics. Its most recent major achievement was the discovery in 2012 of the Higgs boson, which was achieved using the CERN’s Large Hadron Collider (LHC), a proton-proton colliding superconducting ring with a circumference of 27 km – the most powerful particle accelerator in the world. To accomplish its scientific aims, the Organization is intensely involved in technology, innovation and education. Every year, it receives and trains hundreds of students, offering them both theoretical and on-the-job training, as well as more than one thousand high-school teachers from Member and non-Member States alike.

CERN is a concrete example of international cooperation with strong links to national research institutions and agencies. It contributes to the expansion of knowledge and allows society to profit from the innovations brought about as a result of its activities, therefore having a positive impact in non-Member States too. Its way of advancing science, unrestricted by geographic and political borders, allows CERN to create bridges between cultures and foster peaceful cooperation among people and countries around the world.

The Economic and Social Council (ECOSOC) (ECOSOC) is the United Nations’ central platform for reflection, debate, and innovative thinking on sustainable development. ECOSOC engages a wide variety of stakeholders – policymakers, parliamentarians, academics, major groups, foundations, business sector representatives and over 3,200 registered non-governmental organizations – in a productive dialogue on sustainable development through a programmatic cycle of meetings. The work of the Council is guided by an issue-based approach, with an annual theme that accompanies each programme cycle, ensuring a sustained and focused discussion among multiple stakeholders. In 2013, ECOSOC addressed as its theme “Science, technology and innovation, and the potential of culture, for promoting sustainable development and achieving the Millennium Development Goals.” The Council engaged Ministers of Government, the Director-General of CERN, representatives of academia, the private sector and NGOs in its deliberations on this theme. A Ministerial Declaration was adopted by the Council containing broad-based policy recommendations.