



Scientific Advisory Board

of the Secretary-General of the United Nations

hosted by the

United Nations Educational, Scientific and Cultural Organization

REPORT OF THE FOURTH MEETING OF THE SCIENTIFIC ADVISORY BOARD OF THE SECRETARY-GENERAL OF THE UNITED NATIONS

14-15 December 2015
Saint-Petersburg, Russian Federation

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I. Substantive session

1. Opening of the meeting

The fourth meeting of the Scientific Advisory Board of the Secretary-General of the United Nations (hereinafter referred to as “SAB”) took place in Saint Petersburg, Russia, on 14 and 15 December 2015, at the kind invitation of the Russian Federation. The list of participants, comprised of SAB members and observers, is contained in Annex I.

In his welcoming message, President of the Russian Academy of Sciences and member of SAB, Dr. Vladimir Fortov, expressed his contentment in greeting members of this eminent scientific body in the fascinating city of Saint Petersburg. He recalled that the meeting coincided with celebrations related to the seventieth anniversary of the victory in the Second World War and the creation of the United Nations and its Educational, Scientific and Cultural Organization, UNESCO. He also referred to the aim of the Organization to prevent world catastrophes, and to the crucial role of the science and technology in promoting progress and peace. In his capacity as a member of SAB, Dr. Fortov noted the important role of the Board in providing the UN with recommendations on the science-policy interface. Moreover, he underlined the potential of UNESCO Chairs and Networks to be used for future work of SAB. The full text of the welcoming message by Dr. Fortov is contained in Annex II.A.

In his video message, UN Secretary-General Mr. Ban Ki-moon, stressed the importance of the timing at which the meeting was taking place. He underlined that world leaders had just adopted the 2030 Agenda for Sustainable Development and agreed on a new climate change agreement, and that, therefore, the world was on the cast of the future. Mr. Ban Ki-moon called upon SAB members to advise him on how to tackle global problems, especially in relation to the urge to end poverty and inequality. He asked them to offer solutions by giving insights, looking to the future, and anticipating trends through international cooperation. The full text of the video message of the UN Secretary-General is contained in Annex II.B.

In her opening address, Director-General of UNESCO and Chairperson of SAB, Ms. Irina Bokova, stated her gratitude to the Russian Federation for generously hosting the meeting and expressed her happiness that SAB will meet in Saint Petersburg, a world city that embodies the concept of outstanding universal significance, which is at the heart of the UNESCO World Heritage programme. She recalled that Saint Petersburg is a city of great writers and also of great scientists, of the like of Lomonossov and Mendeleev, who have changed the way we see and understand the world. Ms. Bokova highlighted the significance of the new climate agreement and the adoption of the 2030 Agenda, as well as the importance to bring these two agendas together and to take them forward. She underlined that the complexity of the challenges we face today calls for an ever-greater expansion of human knowledge, for a new unity across the sciences, for enhanced connections between scientific and traditional knowledge, and for stronger linkages between science, policy and society. Ms. Bokova advocated the need for a new paradigm for science, technology and innovation, reflecting the contribution of science to poverty alleviation and to the protection of the environment. She stressed the

important role of SAB in assisting the UN Secretary-General to identify, mobilize and harness the power of science, technology and innovation for a transformative change. Ms. Bokova acknowledged the kind invitation by the Government of Italy to host the subsequent meeting of SAB in Trieste in the spring 2016. She then declared the fourth meeting of SAB officially opened. The full text of the opening address by Ms. Bokova is contained in Annex II.C.

2. Consideration and adoption of the preliminary agenda

The Chairperson of SAB presented the preliminary agenda of the meeting. This was adopted with minor amendments, as reported in Annex III. The list of documents for the meeting is contained in Annex IV.

3. Current and future work of SAB

3.1. Progress report on the adoption of the recommendations at the third meeting of SAB and formal adoption of the policy briefs on Data Revolution for Better Lives for All and of the Delphi Study on Top Challenges for the Future of Humanity and the Planet

A member of the SAB Secretariat informed SAB members that, following the discussion at the third meeting of SAB in Kuala Lumpur, Malaysia, in May 2015, and taking into consideration further inputs received in the period comprised between the third and fourth meetings of SAB, the policy briefs on Data Revolution for Better Lives for All and the Delphi Study on Top Challenges for the Future of Humanity and the Planet undertaken by SAB had been amended accordingly.

Following a request by the Chairperson of SAB to consider the revised version of the policy brief and the Delphi Study circulated to all SAB members in preparation of the fourth meeting of the Board for adoption, SAB members formally adopted them without further amendments. The policy brief and the Delphi Study shall be made available on the SAB website (www.unsgsab.org) immediately after the closure of the fourth meeting of the Board.

3.2. Consideration of the outcome of the work streams on climate change and climate induced risks and on indigenous and local knowledge

Climate change and climate induced risks

Dr. Carlos Nobre introduced the draft policy brief on climate change and climate induced risks. He specified that it had been prepared before the Paris Climate Change Conference in November 2015, hence it did not include what the ensuing Paris Agreement may tell us in terms of climate induced risks. The idea beyond this brief was to induce a change in the dominant perception by most climate scientists that the framework to assess climate risks should be based on the likelihood of such risks hence favoring the more likely, and ignoring the less likely, risks.

According to the current climate risk assessment framework, a risk is considered very likely if the probability that it happens correspond to ninety percent, little likely if the probability that it happens is comprised between ten and thirty percent. Currently insurance companies tend to follow an opposite approach, namely, they consider the figure of ten percent of likelihood of occurrence as corresponding to a high risk.

Low probability in climate-induced risks does not exclude high impact. Uncertainty for tipping points related to ice sheet coverage and thickness in Greenland and Western Antarctica are examples of such a situation. Another example is the progressing acidification of the oceans and their related impact on coral systems. Physiological adaptation to increasing temperatures also poses a risk for humans and many other species. Risks are increased by the irreversibility of the climate change process; moreover the Paris Agreement, despite its historical significance for the people and the planet, does not include provisions related to decarbonization *per se*.

Dr. Fortov referred to the relationship between raise in carbon dioxide and temperature and to the importance to use careful language in the policy brief being prepared.

Dr. Jörg Hacker referred to the fact that G7 countries have brought climate change and decarbonization to their agenda for the first time.

Dr. Winston Soboyejo stated that climate risks are a useful way to think and talk about climate change and invited SAB members to pay attention to the related policy nexus, namely, scientists' perspective should be connected with the process of decision-making.

Dr. Maria Ivanova suggested that, as the scientific advisory board of the UN Secretary-General, the policy brief should include advice on what can and should be done in relation to decarbonization. She recalled that convening a climate summit in 2014 was an initiative of the Secretary-General, and that the summit had had significant impact on the subsequent climate talks and decisions.

Dr. Zakri Abdul Hamid cautioned that climate change advice is a crowded field and that it was important to define a role for SAB in this context. He suggested that Board should assist the Secretary-General in setting the agenda and assist him and the UN in their performing a leading role.

Drs. Nobre and Zakri and Dr. Hayat Sindi mentioned the importance of renewables. Fossil fuels will become less expensive, but making them socially unacceptable such as in the case of tobacco needs studies, as this point is politically sensitive.

There was agreement that SAB should neither repeat nor re-open the talks having taken place and the agreement reached in Paris. Nor was the Board's mandate related to what the Intergovernmental Panel on Climate Change (IPCC) already performs in terms of scientific assessments of climate change. It was reiterated that SAB's role is to assist the UN Secretary-General at the interface of science with policy.

SAB endorsed the Paris Agreement by welcoming it as a strong and ambitious agreement and also by inviting Member States to implement it. In doing so, the Board recalled that the implementation process of the Agreement will require both substantial scientific knowledge as well as science advice.

SAB agreed to create a working group to finalize the policy brief on climate change and climate induced risks, under the coordination of Dr. Nobre, and several SAB members volunteered to be part of the group. The brief will also benefit from technical inputs by UNESCO's Intergovernmental Oceanographic Commission (IOC).

Indigenous and Local Knowledge

Ms. Joji Cariño presented elements for a possible policy brief on indigenous and local knowledge (ILK). She stated that ILK systems are distinct but complementary to the sciences. These knowledge systems have evolved in association with nature and prove very useful for human adaptation and innovation. Today, ILK continues to inform the lives, decision-making and governance of many indigenous and local peoples and communities in developing and developed countries. Examples include the Philippines, where ILK is increasingly considered in national planning, and the contribution of *Satoyama* and *Satoumi* following tsunami events in Japan. Pastoralists, local farmers and mountain people play a key role in relation to ILK and food security. The 2030 Agenda provides an opportunity to celebrate but also to overcome marginalization of indigenous and local knowledge holders. Securing and promoting ILK is also needed for the purpose of local land use and management. There are clear impacts of globalization on local land use and loss of or threats to local languages. Yet, the contribution of ILK systems to some of the current global issues are clear, such as effective carbon sequestration in indigenous and local areas, some of which result to be much better managed than conventional protected areas. Moreover, community based monitoring complements national monitoring systems, such as in the case of IPCC and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). The 2030 Agenda does not pay specific attention to ILK, which is a matter of concern: while the Millennium Development Goals (MDGs) were not culturally sensitive, Ms. Cariño recommended that this shortcoming is resolved in the context of the Sustainable Development Goals (SDGs). Currently, SDG indicators do not include one single indicator on ILK such as measuring security of land tenure to combat poverty. Highlighting ILK more in the SDGs could be an important message to be sent to the High Level Political Forum (HLPF). The UN system-wide action plan emanating from the World Conference on Indigenous Peoples in 2014 also provides an adequate framework for action. It is SAB's role to promote culture and cultural diversity as creative forces to assist with the 2030 Agenda. Ms. Cariño suggested that a possible working group of the SAB dedicated to ILK might be constituted.

Dr. Soboyejo stated that there was a need to go beyond identifying problems and for solutions to be offered. In the specific case of ILK, there is a need to empower such knowledge and to allow it to offer solutions. He encouraged SAB members, rather than stressing complementarity, to contribute to a systematic approach on mainstreaming ILK

through global education and global scientific research. In this regard, he stressed that there was a need to identify concrete examples of the kind of innovation that ILK can bring, for example, in relation to food security, and to ecosystem management.

Dr. Gebisa Ejeta stressed the importance of creating synergies between ILK and science and for modern science to be contextualized.

Dr. Ivanova suggested to use ILK to connect the climate change agenda and the 2030 Agenda.

Dr. Sindi underlined that there are different ways for enhancing the conditions of local communities, and that solutions require the understanding of local conditions, including religion, hence the need for a framework approach to guide work in this area.

In response to Dr. Abdallah Daar's question on whether there was any mentioning of ILK in the Paris Agreement or the 2030 Agenda, Ms. Cariño informed SAB members that indeed there are provisions in the current climate change regime related to technology adaptation and the contribution, as appropriate, of traditional knowledge, knowledge of indigenous peoples and local knowledge systems. Ms. Cariño referred to recent developments and trends in relation to co-creation of knowledge and collaboration of multiple stakeholders (including scientists and indigenous and local knowledge holders) to that effect, the main effort in going forward to this end being provided by IPBES. Indeed, ILK systems can effectively work with science, for example, in ground-truthing satellite observations on forest fires. In relation to education, there is a need to combine access to education with valuing ILK.

SAB endorsed the proposal to create a SAB working group on ILK in charge of producing a related policy brief. Several SAB members volunteered to participate in the working group, under the coordination of Ms. Cariño.

3.3. The role of science in, and science requirements for, the achievement of the 2030 Agenda for Sustainable Development: From the Millennium Development Goals to the Sustainable Development Goals

The Chairperson of SAB invited Dr. Hacker to present the document on the role of science in, and science requirements for, the achievement of the 2030 Agenda for Sustainable Development, which had been prepared with the kind assistance of the German National Academy of Sciences Leopoldina.

Dr. Hacker referred to the need to elaborate further on the contribution of science to the new sustainable development agenda. A number of principles, suggestions of approaches, and for action were presented in the above-mentioned document, including suggestions to scientists to contribute to decision-making processes as well as to decision-makers on how best to take into account relevant scientific knowledge.

The ensuing discussion led to the agreement that the further elaboration of the document in question into the form of a policy brief was important, also in light of its contribution to the final report of SAB to the UN Secretary-General (cf. item 3.4 of the report).

SAB endorsed the development of a policy brief on the role of science in, and science requirements for, the achievement of the 2030 Agenda for Sustainable Development. Several SAB members volunteered to participate in the working group in charge of producing this brief, which will be under the coordination of Dr. Hacker.

3.4. Recommendations to the UN Secretary-General and draft outline of the final report of SAB to the UN Secretary-General

The Chairperson of SAB recalled the request by the UN Secretary-General to produce a final report for his consideration, which should also include suggestions on the future of science advice to the UN Secretary-General and to the UN system. She suggested that recommendations should focus on the interface between science and policy, and that they be pragmatic. She also suggested a focus around the 2030 Agenda and the Paris Agreement.

For the purpose of advancing reflections and deliberations under this agenda item, SAB members constituted two breakout groups, one under the lead of Dr. Daar and the other under the lead of Dr. Avery.

During the ensuing plenary session, and after the presentation by the two breakout groups of their recommendations, several points were raised in relation to important dimensions of science advice for sustainable development which should be reflected in the final report of the Board, specifically:

- the importance of frontier research/discovery science for boosting innovation
- the role of the private sector
- diversity beyond women in science
- gaps and opportunities on science for sustainable development, including in relation to the need to create opportunities for communities that have not seen any benefit of the contribution of science to sustainable development thus far
- the mechanics of science advice to the UN Secretary-General and the UN system, and lessons learned through the SAB
- the consideration that the formation of SAB has been both an important political and symbolic gesture
- the centrality of UNESCO's role in the effective functioning of SAB
- the role of the UN Secretary-General in defining precise requests for scientific advice in light of the policy agenda
- lessons learned in relation to the capability of SAB to address the requests received
- the conditions of access to the UN and to the Secretary-General, and the need for and role of a SAB focal point at the Office of the Secretary-General

- SAB's engagement with relevant groups, in order to observe but also to inform relevant processes
- considerations on the supply side of science advice
- cooperation with organizations like ICSU and initiatives such as Future Earth
- questions related to the engagement of other UN organizations and formal ways for identifying issues of importance to them
- the possibility of a continuous foresight role through an on-going Delphi Study

Several SAB members stressed the importance of positioning the final report to the UN Secretary-General in the context of the global framework on, and of efforts to promote, sustainable development and climate change. SAB members agreed to integrate in the report the various policy briefs elaborated and consolidated under the auspices of SAB since its inception. The lessons learned as well as clear recommendations on how in the future to shape the science advice to the UN Secretary-General, in particular, and to the UN family, in general, should be clearly set out in the final report. This report may also pave the way for other ideas to be potentially continued by future advisory groups. The SAB members considered the final report of the Advisory Board on Water and Sanitation of the UN Secretary-General as a good reference point regarding length, substance and structure of the final report of SAB.

SAB members also discussed in detail the contents of work to be done by the Board that will lead to the preparation of its final report.

Dr. Ejeta stated that food security is certainly already widely addressed but that it is so central to the need of humanity and as a driver to the MDGs and the SDGs as well as the climate change agenda (although one wonders what drives what, but certainly it constitutes a driver for moving people). One third of the human population calls itself small producers. Africa feeds eight percent of the world population but suffers from food insecurity. The absence of a message on food security on behalf of SAB would be a wrong message that is that food security is considered not important enough to be reflected in the work and deliverables of SAB, which is not true.

Several SAB members supported the suggestion by Dr. Ejeta. Dr. Avery called for an integrated discussion on food security discussion, which should also include an ocean component. In response, Dr. Ejeta referred to the importance to also address livestock-related issues, because of the connections between food, nutrition and health. Dr. Soboyejo suggested to reflect the perspective of formulating practical solutions beyond agriculture, such as capacity, and threats from biofuels. Dr. Ivanova stated that food security provides an interesting angle to illustrate the transition from the MDGs to the SDGs.

Dr. Ivanova offered to discuss with the University of Massachusetts Boston UMB a possible contribution to the production of the final report by engaging a science writer.

SAB agreed to produce a policy brief on food security and health, and established a dedicated working group under the coordination of Dr. Ejeta.

SAB adopted the outline of the final report as contained in Annex V. Drs. Avery and Ivanova accepted to take over the lead on assisting in the coordination of the drafting of this final report, in close cooperation with the SAB Secretariat.

SAB welcomed the generous offer by Dr. Ivanova to explore the possibility that UMB contributes to the production of the final report by making available a science writer and asked the SAB Secretariat to follow-up with UMB on such offer.

SAB agreed on a work plan including the scope and composition of working groups and the timeline for the production of related deliverables as contained in Annex VI.

3.5. Preliminary list of SAB events planned for 2016

Following a presentation by a member of the SAB Secretariat, SAB members discussed and agreed on the preliminary list of events contained in Annex VII.

3.6. SAB Communication strategy in 2016¹

Following a presentation by a representative of the SAB Secretariat, SAB members agreed on the need and importance of a strong communication strategy for 2016. The main points that emerged during the discussion and which will guide the communication strategy were:

- A central message should be defined to communicate in ways that reflect SAB's inputs to different audiences and regions
- The main message must be STI for sustainable development, from multiple perspectives (thematic and geographic)
- There must be communality and consistency in communication by SAB members (i.e. they should be based on approved SAB policy briefs and recommendations) while leaving room for personal inputs of each, drawing from their fields and expertise
- Different components must be communicated to different communities: the tone and content for the policy section of a scientific journal will differ from the tone and content for news media (Opinion Editorials, Op Eds) or for a network such as the World Academy of Science, or SciDevNet
- All three are of interest to reach an audience of experts while also raising awareness more broadly
- SAB members each have strong networks within which they can have a voice as members of the Board to share the recommendations and communicate about the work of the SAB

¹ Related to communication issues and media coverage, a press conference was organized on the day preceding the beginning of the fourth meeting of SAB. Media coverage of meeting is reflected in the appendix to this report.

- Strong coverage must be organized around the SAB final report to the UN Secretary-General to share the finalized recommendations and what the Board wants to accomplish clearly and broadly
- Several SAB members have already written Op Eds highlighting SAB's work, and all were encouraged to do so, on a voluntary basis. SAB members were encouraged to share information on their communications with the Secretariat, which will keep them informed on outreach efforts regularly

SAB members endorsed the proposed main elements of a communication strategy for SAB in 2016 as contained in Annex VIII.

4. Closure of the meeting

Dr. Zakri, in his capacity as Co-Chairperson of SAB, DG, thanked the Government of Russia and the Russian Academy of Sciences for hosting the meeting. He thanked Dr Fortov personally for his leadership. He expressed warm thanks to the Russian National Commission of UNESCO and the Permanent delegation of Russia to UNESCO for the very efficient and smooth assistance provided to the meeting, as well as the SAB Secretariat. He thanked personally all members of SAB for their participation in and contributions to the meeting.

Dr. Fortov commended in particular the efforts of the Russian National Commission for UNESCO, the significant support provided by PhosAgro, and thanked all SAB members for their participation.

The representative of the Secretariat acknowledged the contribution of the German National Academy of Sciences Leopoldina to the documentation for the meeting, the presence and contribution of observers, and thanked the local organizers for the assistance provided prior to and during the meeting.

The Co-Chairperson of SAB then declared the meeting closed.

II. High Level Open Discussion Panel

A High Level Open Discussion Panel was organized on the margins of the meeting of SAB in order to provide Board members with an opportunity to interact with representatives of the Russian scientific community, presidents of Russian universities, heads of UNESCO chairs and representatives of the Russian authorities. The event took place in the premises of the National Mineral Resources University.

In his welcoming address, Professor Vladimir Fortov, President of the Russian Academy of Sciences, welcomed the participants and organizers of such an important event, expressing his special gratitude to the Director-General of UNESCO, to the SAB members, the Governor of Saint Petersburg and the Russian National Commission for UNESCO. He referred to SAB as an exceptional body due to its outstanding composition, the importance of its contribution for the 2030 Agenda, and the significance

of the discussions held at each meeting of the Board and the ensuing recommendations. He also underlined the importance of international scientific cooperation and the need for a tight connection between science and policy. The full text of the welcoming message by Professor Fortov is contained in Annex II.D.

During the Panel Director-General of UNESCO Ms. Irina Bokova was made *Honoris Causa* Member of the Russian Academy of Sciences. The event also saw the announcement of the recipients of the UNESCO/IUPAC/PhosAgro International Prizes in Green Chemistry.

The Panel benefited from remarks by Governor of Saint-Petersburg Mr. Georgyi Poltavchenko; President of the National Mineral Resources University Mr. Vladimir Litvinenko; and CEO of PhosAgro Mr. Andrey Guriev.

In her address on the occasion of the High Level Open Discussion Panel, Ms. Bokova referred to the distinguished history and traditions of the Russian Academy of the Sciences and the National Mineral Resources University, and reflected on the place of the science and the importance of innovative approaches in these new times of deep change across the world. She expressed her gratitude for the opportunity to speak before the National Mineral Resources University and especially for the honor to receive the title of Honorary Member of the Russian Academy of the Sciences, as a sign of the values and goals shared by UNESCO and the Russian Academy, namely to build the defenses of peace through cooperation in education, the sciences, culture, communication and information. Ms. Bokova stated the names of the great Russian and foreign scientists of the Russian Academy - Mikhail Lomonossov, Dmitri Mendeleev, Nikolai Vavilov, Vladimir Vernadsky, Leonhard Euler, Charles Darwin, and André-Marie Ampère – and appealed scientists to follow this deep tradition of cooperation among researchers. She underlined the very need for cooperation today, when the challenges are steep and opportunities so vast. By her words, the humanity has entered a new age of limits and needs more of renewable energy, of human ingenuity, creativity and innovation. The full text of Ms. Bokova's address is contained in Annex II.E.

ANNEX I – LIST OF PARTICIPANTS

Irina BOKOVA
Director-General of UNESCO
Chairperson of SAB

SAB Members

Susan AVERY
President and Director, Woods Hole
Oceanographic Institution

Joji CARIÑO
Abdallah S. DAAR
Director, Forest Peoples Programme, UK (via
video link)
Professor of Public Health Sciences and of
Surgery, University of Toronto, Canada; Chief
Scientist and Chief Ethics Officer of Grand
Challenges of Canada

Gebisa EJETA
Distinguished Professor of Agronomy, Purdue
University, USA

Vladimir FORTOV
Ke GONG
Jörg Hinrich HACKER
President, Russian Academy of Sciences
President, Nankai University, China
President, German National Academy of
Sciences Leopoldina

Maria IVANOVA
Co-Director, Center for Governance and
Sustainability, McCormack Graduate School of
Policy and Global Studies, University of
Massachusetts Boston, USA

Eva Zsuzsanna KONDOROSI
Research Professor, Biological Research Centre,
Academy of Sciences of Hungary

Reiko KURODA
Professor, Research Institute for Science and
Technology, Tokyo University of Science

Dong-Pil MIN
Emeritus Professor of Physics, Seoul National
University; Ambassador for Science and
Technology Cooperation of the Republic of Korea

Carlos NOBRE
President, CAPES Foundation, Ministry of
Education of Brazil

Hayat SINDI
Co-Founder and Director of 'Diagnostics for All';
Founder and President, Institute for Imagination
and Ingenuity

Winston Oluwole SOBOYEJO
President, African University of Science and
Technology (AUST), Nigeria and Professor,

Zakri ABDUL HAMID
Princeton University, USA
Science Advisor to the Prime Minister of
Malaysia; Chair, Intergovernmental Platform on
Biodiversity and Ecosystem Services (IPBES)
(Co-Chairperson of SAB)

Observers

Eva ALISIC	Co-Chair, Global Young Academy
Fabrizio IURLANO	Ministry of Foreign Affairs and International Cooperation of Italy
Ruth Maria NARMANN	German National Academy of Sciences Leopoldina
Christian WEIDLICH	German National Academy of Sciences Leopoldina

SAB Secretariat

Flavia SCHLEGEL	Assistant Director-General for Natural Sciences
Vladimir RYABININ	Assistant Director-General and Executive Secretary, Intergovernmental Oceanographic Commission of UNESCO
Salvatore ARICÒ	Natural Sciences Sector
Isabelle BRUGNON	Natural Sciences Sector
Léo TREMBLEY	Natural Sciences Sector
Kristof VANDENBERG	Office of the Director-General

ANNEX II – TEXTS OF SPEECHES

A. Welcoming message by Professor Vladimir Fortov, President of the Russian Academy of Sciences on the occasion of the opening of the fourth meeting of the Scientific Advisory Board of the UN Secretary-General

Your Excellency Mrs Irina Bokova, Director General of UNESCO,
Distinguished UN Scientific Advisory Board members,
Ladies and gentlemen,
Dear colleagues,

Let me first welcome all of you here in the fascinating city of Saint Petersburg founded by the Peter the Great three hundred and twelve years ago to become one of the most famous cities in the world.

For me and for the whole Russian scientific community it is a great honor to host the meeting of this eminent body in Saint Petersburg. I am grateful that you could find time in your tight schedules and come here to share your ideas on the SAB rich agenda.

This year the international community celebrates the seventieth anniversary of the victory in the Second World War obtained by forces of peace and progress over the forces of war, racism and destruction.

It is the year of the seventieth anniversary of the United Nations – a unique universal organization established with the aim to prevent such disastrous and devastating world catastrophes as the Second World War was.

It is the jubilee year for UNESCO too, marked by achievements of the Organization in the fields of its competence representing the most important spheres of human activities – education, science, culture, communication.

During this meeting of the SAB, whose Secretariat runs under the auspices of UNESCO, we will draw the line under two years of our work. I find it symbolic that this is happening at the end of the anniversary year.

“Science and technology have crucial roles to play in promoting progress and peace”, as the UN Secretary General Ban Ki-moon has put it. As a SAB member, I would like to say that I appreciate very much his initiative of the creation of this body with the view to providing the UN with our vision and recommendations on science-policy interface.

Parallel to our meeting, the Congress of UNESCO Chairs in Russia discusses ways how to contribute to the implementation of the 2030 Agenda for Sustainable development.

In my opinion, UNESCO Chairs and Networks represent an important potential to be used for the further SAB work. Some of the Congress delegates, presidents of

Russian leading universities and heads of UNESCO Chairs will take part in high level discussion panel this afternoon and, hopefully, contribute to our discussion there.

In conclusion, let me wish to all of you a very pleasant stay in our “North Capital”, as we call Saint Petersburg, and energy to generate scientific ideas and recommendations with the view of achieving SAB task.

Thank you for your attention.

B. Text of the video message of the UN Secretary-General on the occasion of the opening of the fourth meeting of the Scientific Advisory Board of the UN Secretary-General

Your Excellency, Mr. Vladimir Putin, President of the Russian Federation,
Dr Vladimir Fortov, President of the Russian Academy of Sciences,
Distinguished Members of the Commission of the Russian Federation for UNESCO,
Distinguished Chairperson and Members of the Scientific Advisory Board,
Excellences,
Ladies and Gentlemen,

As you meet the world is on the cast of a new future.
Leaders have just adopted the 2030 Agenda for Sustainable Development.
Negotiators have met in Paris to reach a new climate change agreement.
Action is essential to rise to global challenges.
We need science to end poverty, promote low carbon economy and transform our world.

That is why your work is so important.
You can therefore advise on how to tackle global problems by harnessing the power of science.

We especially need to focus on how science can help the poor and end inequality.
And we must do this through international cooperation.

Give us your insights.
Look to the future.
Anticipate trends.
Confront problems and offer solutions.
In this spirit I wish you great success.

C. Address by Ms. Irina Bokova, Director-General of UNESCO and Chairperson of SAB on the occasion of the opening of the fourth meeting of the Scientific Advisory Board of the UN Secretary-General

Professor Vladimir Fortov, President of the Russian Academy of Sciences, Excellencies,
Ladies and Gentlemen,

Distinguished Members of the Scientific Advisory Board of the United Nations Secretary-General,

Let me thank the Italian authorities, represented here by Mr Fabrizio URLANO, for hosting the next Scientific Advisory Board,

Thank you for coming to this 4th meeting of the Scientific Advisory Board of the United Nations Secretary-General, Mr Ban Ki-moon.

It is a special honor to hold this meeting here, in St Petersburg.

St Petersburg is a world city, a city embodying the concept of “outstanding universal significance” at the heart of the UNESCO World Heritage programme.

It reminds me of genius the writer Fyodor Dostoyevsky, who had something like this in mind when he called St Petersburg “the most international city of the world.”

One year ago exactly, I was honored to attend the 250th anniversary of the State Hermitage Museum, and this was a deeply moving moment.

St Petersburg is a city of great writers – it is also a city of great scientists, scientists who have changed the way we see and understand the world.

The city’s founder, Peter the Great, was a passionate advocate of scientific discovery and technological advancement, and this city has nurtured the world’s best minds, catalyzing progress at the forefront of change.

Think of Mikhail Lomonosov. Think of Dmitri Mendeleev.
We should draw inspiration from these great Russians.

I am deeply grateful to the Russian Academy of Sciences, and its President, Professor Vladimir Fortov, for their leadership.

I have just come from the Paris Climate Change Conference, where UNESCO worked to place science at the heart of the discussions on mitigating and adapting to the impact of global change.

This is an ambitious agreement and we will need more science – more science to monitor the progress and to confirm that we have the technologies to make the ambitions true.

The COP21 took place two months after world leaders agreed on the 2030 Agenda for Sustainable Development.

I see these as the same agenda.

The most important work for UNESCO is to bring these two agendas together. An agenda for human rights and dignity, for poverty eradication, for sustainability. Science is essential to taking this agenda forward. But not just any science.

We need stronger science, more connected science.

We need science that is more deeply integrated into policy-making.

The complexity of challenges we face today calls for an ever greater expansion of human knowledge, for a new unity across the sciences, for enhanced connections between scientific and traditional knowledge, for stronger linkages between science, policy and society.

This is the importance of the Scientific Advisory Board. Your contribution as promoters of science is critical. We need a new bond of unity between all sciences and science policy.

Like never before, I believe we need a new paradigm for science, technology and innovation, science for poverty alleviation and for the protection of the environment.

'Progress' has no meaning if it only benefits the few – if it doesn't eliminate poverty, reduce inequalities, protect the world we live in.

This is why your ideas and vision, your experience, are so important.

Science has been at the heart of 2015 – the 2030 Agenda for Sustainable Development, the Addis Ababa Action Agenda, the Sendai Framework for Action, the Paris Climate Change Conference.

We must build on these foundations, there is no time to lose, to support the ability of every society to create and share knowledge, to nurture every source of innovation and creativity, to craft a more inclusive, sustainable and just path to the future.

The message of the United Nations Secretary-General is clear.

He needs the Scientific Advisory Board to help him and the United Nations system, identify, mobilize and harness the best science, technology and innovation for transformative change.

In this light, I look forward to our discussions on the science requirements for the 2030 Agenda, on emerging trends and on overall recommendations to the Secretary-General – with a view to producing a full report by July 2016.

This calls for ambitious thinking and strong organization, and, for this, you may on

the full support of UNESCO as Secretariat.

Thank you.

D. Welcoming message by Professor Vladimir Fortov, President of the Russian Academy of Sciences on the occasion of the High Level Discussion Panel during the fourth meeting of the Scientific Advisory Board of the UN Secretary-General²

Your Excellency Mrs Irina Bokova, Director General of UNESCO,
Distinguished UN Scientific Advisory Board members,
Ladies and gentlemen,
Dear colleagues,

Allow me to welcome everyone in this wonderful hall.

I would like to begin by thanking HE Mrs Irina Bokova, Director-General of UNESCO and my colleagues, distinguished members of the UN Scientific Advisory Board, for coming to Saint-Petersburg for the Forth meeting of this body.

As we all know the creation of the SAB was initiated by Secretary General Ban Ki-moon to offer recommendations in approaching some of today's most pressing issues as well as to advise on ways these approaches can be reflected in political decision-making.

In my view our body is unique as it is comprised of colleagues who themselves not only work in completely different areas of research but represent various scientific schools. Every meeting gives us a chance to look at a problem from a new perspective and hear a whole array of opinions. To my delight some of our findings are later reflected in core UN documents.

I am particularly pleased that the SAB played an active role in shaping the 2030 Agenda for Sustainable Development, adopted by the UN General Assembly last September. In addition certain Board Recommendations gained serious recognition such as the Science-Policy interface, Data Revolution and Climate change and associated risks.

I would like to acknowledge Mr Georgii Poltavchenko, Governor of Saint-Petersburg for his invaluable support in hosting our event in this magnificent city. Likewise I offer my gratitude to the Russian commission for UNESCO for coordinating and organizing our Meeting.

I am pleased and grateful to see in this room representatives of Russian academia for I am certain they will bring an invaluable contribution to our discussion and enrich today's SAB proceedings with original ideas and opinions.

Russian writer Anton Chekov, concise as ever, said once that there cannot be national science, just as there cannot be a national Multiplication table. Truly, only by combining our efforts and through a constant exchange of best practices and viewpoints can we make fundamental advances. It essential that those advances are not limited to pure

² Courtesy translation by the Permanent Delegation of the Russian Federation to UNESCO.

science but are reflected in Policy so science can benefit our society today. We are thus called upon on by the Secretary-General to carry on our work and we shall do so.

I thank you for your attention.

E. Address by Ms. Irina Bokova, Director-General of UNESCO, on the occasion of the High Level Discussion Panel during the fourth meeting of the Scientific Advisory Board of the UN Secretary-General

Professor Vladimir Fortov, President of the Russian Academy of Sciences,
Professor Vladimir Litvinenko, Rector of the National Mineral Resources University,
Excellencies, Ladies and Gentlemen,
Dear Professor,

Thank you for this invitation.

I am honored by this opportunity to speak before the National Mineral Resources University.

I know the long and distinguished history of this University – first, as an ambition of Peter the Great and Mikhail Lomonosov, then realized by Catherine the Great, in 1773.

Russia's oldest technical university, the National Mineral Resources University stands today at the cutting-edge of global research and teaching in science, technology and innovation.

I am deeply honored to be granted the title of Honorary Member of the Russian Academy of Sciences.

Created by Peter the Great in 1724, here in the city of St Petersburg, the Russian Academy of Sciences is an institution that has changed the way we see the world.

I am thinking of Mikhail Lomonosov.
I am thinking of Dmitri Mendeleev.
Nikolaï Vavilov.
Vladimir Vernadsky.
This list is long.

This includes not only Russian names, but many leading foreign scientists, who came to this city, to the stimulating environment of the Academy, to profit from the exchange of ideas.

Here again the list is long, including Leonhard Euler, Charles Darwin, André-Marie Ampère.

The Russian Academy of Sciences counts 14 Nobel Prizes, from physics to economics to peace.

I am humbled to join such a distinguished community.

I am honored to accept this title as a sign of the values and goals shared by

UNESCO and the Russian Academy of Science, to build the defenses of peace through cooperation in education, the sciences, culture, communication and information.

I thank the Russian Academy of Sciences, especially its President, Professor Vladimir Fortov, for this honor.

I believe cooperation has never been so important.

We are living in times of deep change across the world. Opportunities have never been so vast, for dialogue, for exchange.

At the same time, challenges are steep.

These are times of turbulence, when poverty and inequalities remain deep, when societies are undergoing transformation, when the planet faces rising pressure from the impacts of climate change.

In this picture of complexity, one point emerges clearly. The world is calling out for science.

It is calling for innovative approaches across disciplines.

It is calling for stronger linkages between science and policy.

I believe we have entered a new age of limits – limits in resources, limits of the planet.

This means we must make far more of the greatest renewable energy we have. This is human ingenuity. This is creativity and innovation.

This is why science is so vital today, to craft new solutions that are inclusive, just and sustainable.

Science is the way to link the economic, the environmental and the social dimensions of sustainability.

Science is about knowledge, about making progress in understanding the world around us.

It is also – and this is a lesson of the history of this University -- about making knowledge available *to all*, to maximize benefits *for everyone*.

I have just come from the *Paris Climate Change Conference*, where UNESCO worked to place science at the heart of the discussions on mitigating and adapting to the impact of global change.

The COP21 took place two months after world leaders agreed on the 2030 Agenda for Sustainable Development.

I see these as the same agenda.

An agenda for human rights and dignity, for poverty eradication, for sustainability. Science is essential to taking this agenda forward. Not just any science.

Stronger science, more connected science. Science that is integrated into policy-making. Science that is bold and ambitious. We need a new focus on the sciences, to promote equitable and inclusive growth, to eradicate poverty, to bolster energy, water and food security, to control disease, to mitigate disasters, to build sustainable cities.

Last month, UNESCO launched its *UNESCO World Science Report*. The Report shines light on the new landscape of science emerging. New hubs are rising. A new geography of science and technology is taking shape. Science is more mobile than ever before.

More and more Governments and companies are investing in sustainable technologies and science, to power commerce, to craft new solutions.

We must accompany and support these trends.

The same message was sent during the *World Science Forum*, on 7 November 2015, organized by the Government of Hungary and UNESCO.

Let us look at the challenge of climate change.

For UNESCO, responding to climate change requires action across the board. First, to advance climate science. This starts with UNESCO's International Hydrological Programme, to help States manage water resources and address needs through science.

UNESCO's 'water family' represents a global network of 28 water-related centers, including the IHE-Institute for Water Education, 30 water-related Chairs, and the World Water Assessment Programme, which leads the annual World Water Development Report.

This includes the leading role of the UNESCO Intergovernmental Oceanographic Commission, for essential ocean science and observation, for early warning systems.

This involves the activities of the Man and the Biosphere Programme, in safeguarding biodiversity, as well as the Management of Social Transformations Programme, to support societies in transformation.

UNESCO's second level of action is climate change education.

This was the inspiration that underpinned the United Nations Decade on Education for Sustainable Development (2005-2014), sponsored by Japan and led by UNESCO.

This was the message of the UNESCO World Conference on Education for Sustainable Development, organized by Japan, last year, in Aichi-Nagoya -- embodied in the follow-up Global Action Programme on Education for Sustainable Development that UNESCO is taking forward.

Sustainability must begin on the benches of schools, in the auditoria of universities such as this one.

I believe we all know why.

Because education is the best way to craft new ways of seeing the world, new ways of thinking, new ways of behaving, as global citizens.

Science cooperation is the guiding principle to all UNESCO's action.

Think of the European Organization for Nuclear Research (CERN), which has pushed forward the boundaries of fundamental science on the origins of matter.

CERN was founded in Geneva, Switzerland, in 1954, under the auspices of UNESCO, to foster peaceful scientific exchanges, for the benefit of all societies.

Cooperation is the deepest tradition of science, built on the values of openness and integrity, to advance the borderless quest of new knowledge.

As the great scientist Louis Pasteur once said:

Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world.

I would say the same spirit guides the Scientific Advisory Board of the United Nations Secretary-General, hosted by UNESCO, which is now convening in St Petersburg.

The Scientific Advisory Board is made up of 26 eminent scientists from different countries and cultural backgrounds, who join forces to advise the United Nations

Secretary-General on issues with global impact – including the essential role of science in implementing the new 2030 Agenda.

Along with cooperation, I believe we also need audacity today. It was audacity that built this great city.

Audacity inspired great scientific discoveries in these halls.

Audacity is the foundation stone for the Russian Academy of Science.

I believe a similar audacity led to the creation of UNESCO seventy years ago, after a devastating war, when the world was rebuilding, guided by a new vision of peace.

This reminds me of the words of Leo Tolstoy on the importance of freethinking:

Freethinkers are those who are willing to use their minds without prejudice and without fearing to understand things that clash with their own customs, privileges, or beliefs. This state of mind is not common, but it is essential for right thinking.

So, I end with an appeal to everyone here today, to think freely and to act together, to craft a better future for all.

This has never been so important.

In this spirit, I thank you again for the title of Honorary Member. Thank you.

ANNEX III – AGENDA OF THE MEETING

I. Substantive session

1. Opening of the meeting
2. Consideration and adoption of the preliminary agenda
3. Current and future work of SAB
 - 3.1. Progress report on the adoption of the recommendations at the third meeting of SAB and formal adoption of the policy briefs on Data Revolution for Better Lives for All and of the Delphi Study on Top Challenges for the Future of Humanity and the Planet
 - 3.2. Consideration of the outcome of the work streams on climate Change and climate induced risks and on indigenous and local knowledge
 - 3.3. The role of science in, and science requirements for, the achievement of the 2030 Agenda for Sustainable Development: From the Millennium Development Goals to the Sustainable Development Goals
 - 3.4. Recommendations to the UN Secretary-General and draft outline of the final report of SAB to the UN Secretary-General
 - 3.5. Preliminary list of SAB events planned for 2016
 - 3.6. SAB communication strategy in 2016
4. Closure of the meeting

II. High Level Discussion Panel

ANNEX IV – LIST OF DOCUMENTS

Working documents

SAB/4/1	Preliminary Agenda and Timetable
SAB/4/2	Draft policy brief on climate change and climate induced risks
SAB/4/3	Draft elements for a policy brief on indigenous and local knowledge and science
SAB/4/4	Outcomes of milestone events in 2015 and implications for SAB
SAB/4/5	Preliminary list of SAB-related events planned for 2016
SAB/4/6	The role of science in, and science requirements for, the achievement of the 2030 Agenda for Sustainable Development: From the Millennium Development Goals to the Sustainable Development Goals
SAB/4/7	Draft outline of the comprehensive report of SAB to the UN Secretary-General
SAB/4/8	Outreach and communication plan

Information documents

SAB/4/INF/1	Text of the video message of the UN Secretary-General to the fourth meeting of SAB
SAB/4/INF/2	Information note for participants
SAB/4/INF/3	List of participants
SAB/4/INF/4	List of documents
SAB/4/INF/5	Report of the third meeting of SAB
SAB/4/INF/6	Policy brief on data revolution for better lives for all
SAB/4/INF/7	Results of a Delphi study on the top challenges for the future of humanity and the planet to be brought to the attention of the UN Secretary-General
SAB/4/INF/8	The co-benefits of actions on climate change and public health (submission by the Leopoldina German Academy of Sciences)

ANNEX V – OUTLINE OF THE FINAL REPORT OF SAB TO THE UN SECRETARY-GENERAL

- I. Background (context, RIO+20, SDGs, Climate Change, TORs)

- II. Topics to be determined from record of briefs, reflections, events, recommendations (no more than 10 topics; for each topic a one page summary to be developed on the achieved results, highlight seminal results, impact, and recommendations)

- III. Future suggested topics, activities (section to reiterate Delphi Study topics)

- IV. SAB advice
 - a. What we have learned working as a group
 - b. Advice on what can be improved
 - c. Recommendations on SAB structure, process, TORs, etc.
 - a) Secretariat support
 - b) Access and engagement to the UNSG and the UN
 - c) Visibility and impact
 - d) SAB structure
 - e) Other?

ANNEX VI – WORK PROGRAMME OF SAB (JANUARY TO JUNE 2016)

Deliverable/ focal point	Month										
	JAN	FEB		MAR		APR		MAY		JUNE	
Report SAB4 (Secretariat)	First draft for internal approval; circulation to SAB members for approval	Incorporation of changes and transmittal to the SG									
Climate risks PB (Nobre, Chair; members of WG: Avery, Hacker, Ivanova, Kalnay, Soboyejo)	Gather comments (done)	Revise draft	Circulate revised draft	Finalize final text (fix outstanding queries and edit)	Transmit to SG						
ILK PB (Cariño, Chair; members of WG: Ejeta, Gong, Kalnay, Kuroda, Sindi)		Produce first draft	Circulate to SAB members for comments	Finalize final text (fix outstanding queries and edit)	Transmit to SG						
Science for the 2030 Agenda PB (Hacker, Chair; members of WG: Abrahamse, Avery, Daar, Kalnay, Kondorosi, Yonath)	Develop working plan (done)	Circulate draft brief	Gather comments	Finalize final text (fix outstanding queries and edit)	Transmit to SG						
Food security and health (Ejeta, Chair; members of WG: Abrahamse, Avery, Kalnay, Kondorosi, Nobre, Sindi, Soboyejo)		Draft outline	Circulate first draft	Incorporate comments	Transmit to SG						
Final report ³ (Secretariat, with assistance from Avery, Ivanova and UMB)	Produce outline (done)	Gather materials and assign tasks	Process already existing briefs/notes	Process newly developed briefs	Circulate zero draft	Incorporate comments	Circulate revised zero draft	Edit text and circulate first draft	Discuss report at SAB5	Edit report	Publish report

³ The final report will build on the following deliverables:

(1) Preliminary reflections on the Crucial Role of Science for Sustainable Development and the Post-2015 Development Agenda (Policy Brief, July 2014); (2) Reflections on climate change on the occasion of the UN SG Climate Summit (Policy Brief, September 2014); (3) Comments on the IAEG Draft Report on Data Revolution (Note, October 2014); (4) Initial Assessment of the Report Entitled “A World That Counts: Mobilizing the Data Revolution for Sustainable Development” (Note, March 2015); (5) Strengthening the High-Level Political Forum and the UN Global Sustainable Development Report (Policy Brief, July 2015); (6) Science, Technology and Innovation: Critical Means of Implementation for the SDGs (Note, July 2015); (7) Delphi Study on Top Challenges (December 2015); (8) Data Revolution for Better Lives for All (Policy Brief, December 2015); (9) Climate Change Induced Risks (new policy brief); (10) Science and Indigenous and Local Knowledge (new policy brief); (11) Science for 2030 (new policy brief).

ANNEX VII – LIST OF SAB EVENTS PLANNED IN 2016

UNESCO-SAB event on Monitoring STI in the SDGs (UN HQ, New York) (to be held between 8 and 11 March 2016)

The objective of the event would be to reflect on the key principles for monitoring of STI in the SDGs, including data collection, capacity building and inclusiveness from the SAB perspective and to showcase UNESCO's STI monitoring tools (via the UNESCO Institute for Statistics and UNESCO Natural Sciences Sector, including the UNESCO Science Report, the Global Observatory of Science Policy Instruments (GO-SPIN), the World Water Development Report, etc.). This event would be organized on the margins of the meeting of the UN Statistical Commission (8–11 March 2016), at which the SDG indicators are expected to be adopted.

The following SAB members have expressed interest in participating:
Avery, Daar, Ejeta, Ivanova, Kuroda, Sindi and Soboyejo.

UNESCO/IOC-SAB event on Climate Change and the Ocean (UN HQ, New York) (to be held on 13 or 14 June 2016)

The event, organized as a joint SAB, UNESCO and Intergovernmental Oceanographic Commission of UNESCO (IOC) event, would highlight the links between climate change and the ocean and propose recommendations for future action. The event would draw on the results of the UNFCCC COP 21, SAB's policy brief on assessing the risks of climate change, and the conclusions of the Ocean and Climate conference organized by IOC. It could be an opportunity to release SAB's policy brief on assessing the risks of climate change officially, with a press release and perhaps a short press conference. Originally intended to take place on the margins of the thematic debate of the President of the General Assembly (PGA) on Climate Change, which should be held on 21 April 2016, it is proposed that it takes place on the margins of the UN Informal Consultative Process on Oceans and the Law of the Sea (UN HQ, New York, 13 to 17 June 2016).

The following SAB members have expressed interest in participating:
Avery, Dong-Pil Ming, Nobre.

Fifth SAB meeting (Trieste, Italy) (to be held on 24 and 25 May 2016)

Presentation of the Final Report of the SAB in New York (UN HQ, New York, date to be determined)

June/July on the margins of the HPLF, or alternatively September during the UN General Assembly.

It is envisaged that all SAB members be present.

ANNEX VIII – MAIN ELEMENTS OF A COMMUNICATION STRATEGY FOR SAB IN 2016

I. General elements guiding communication activities

Context

The Scientific Advisory Board was created in 2013 at the request of the UN Secretary-General to further inform the debate on sustainable development. The Secretariat is hosted by UNESCO at the request of the Secretary-General. The central function of the Board is to provide advice on science, technology and innovation (STI) for sustainable development to the Secretary-General and to executive heads of UN organizations. The Board brings together in a coherent manner the collective capacity of all relevant scientific fields, with due regard to social and ethical dimensions of sustainable development. The fields span a broad spectrum, from the basic sciences, through engineering and technology, social sciences and humanities, ethics, health, economic, behavioral, and agricultural sciences, in addition to the environmental sciences, which are more commonly associated with sustainability.

The Board is composed of 26 independent, eminent scientists representing all regions and many scientific disciplines relevant for sustainable development.

Challenges

The Board is essentially an independent advisory body. It is not a UNESCO initiative, and new channels must be developed to communicate on their work and recommendations. There is also a shared interest by UN/DPI and UNESCO/ERI/DPI⁴ in relation to communicating on the work of the Board, which can create confusion and gaps if information sharing is not streamlined and responsibilities and focal points are not well defined.

Activities

The main SAB events are the official meetings, convened twice a year, to provide a coherent response and advice following the priorities defined by the Secretary-General. However, SAB members also participate in key international meetings in their capacity as Board members, which provide opportunities for targeted communications.

Objectives

- To give visibility of the recommendations and expertise of the Board, on the issues defined by the Secretary-General
- To raise further the profile of the Scientific Advisory Board

Means of communication

The SAB website relays:

- Main activities and news
- Outputs (policy briefs and recommendations)
- The profile of all 26 members, including videos
- The UNESCO YouTube Channel relays short videos, interviews of members, in a dedicated playlist

A dedicated Twitter account was also set up for the SAB: @UNScienceBoard.

There is interest (by UN-DPI and SAB members) in planning a series of Op Eds, placed strategically in conjunction with SAB activities.

II. Main suggested elements of the communication plan

⁴ UN Department of Public Information and UNESCO Department of Public Information, Sector for External relations, respectively.

- Op Eds would be an effective means of disseminating the SAB's independent opinions and advice on sustainable development issues. SAB members could publish a series of Opinion pieces in important journals such as Nature and Science, international media such as The International New York Times, main national media with some international outreach such as the Washington Post, the New York Times, Le Monde, Libération, etc.
- Information sharing between UNESCO and UN-DPI will be improved. The list of key focal points will be updated.
- The connections between the UNESCO and SAB social media accounts will be reinforced.

APPENDIX – MEDIA COVERAGE OF THE MEETING

List of the articles appeared in local and international media⁵

1. News agencies

Date	Media Title	Topic Title	Language
14 December 2015	Информационное агентство России ТАСС / <i>Russian News Agency TASS</i> http://tass.ru/	В Санкт-Петербурге пройдет заседание Научно-консультативного совета при генсеке ООН / <i>Next Meeting of the UN SG's Scientific Advisory Board to be held in St Petersburg</i>	Russian
14 December 2015	Международное информационное агентство «Россия сегодня» / <i>International Information Agency Rossiya Segodnya (RIA Novosti)</i> http://ria.ru/	ООН: наука должна помочь в решении глобальных проблем / <i>United Nations: science should help to resolve global challenges</i>	Russian
14 December 2015	Международное информационное агентство «Россия сегодня» / <i>International Information Agency Rossiya Segodnya (RIA Novosti)</i> http://ria.ru/	ЮНЕСКО и ФосАгро вручат премии 6 ученым за исследования в области экологии / <i>UNESCO and PhosAgro will give research grants in green chemistry to 6 scientists</i>	Russian
14 December 2015	Информационное агентство «Росбалт» / <i>News Agency Rosbalt</i> http://www.rosbalt.ru/	В Петербурге наградят самых перспективных ученых в области "зеленой химии" / <i>The most promising scientists in the field of the green chemistry to receive grants in St Petersburg</i>	Russian
15 December 2015	Информационное агентство «Росбалт» / <i>News Agency Rosbalt</i> http://www.rosbalt.ru/	Химия на страже планеты / <i>Chemistry as a guard of the planet</i>	Russian
14 December 2015	Информационное агентство «Regnum» / <i>News Agency Regnum</i> http://regnum.ru/	ЮНЕСКО в Петербурге наградила лучших ученых-химиков со всего мира / <i>In St Petersburg, UNESCO awards grants to the most promising chemists of the world</i>	Russian
14 December 2015	Международное информационное агентство «Россия сегодня» / <i>International Information Agency Rossiya Segodnya (RIA Novosti)</i> http://ria.ru/	Гендиректор ЮНЕСКО Ирина Бокова стала почетным членом РАН / <i>The Director-General of UNESCO Irina Bokova becomes Honorary Member of the Russian Academy of Sciences</i>	Russian
16 December 2015	News Agency "Sputnik" http://sputniknews.com/	Young Scientists Receive Environmental Awards	English

⁵ Additional communication materials include a UNESCO press release and dedicated news items on the SAB web site (www.unsgsab.org).

2. TV and broadcasting companies

Date	Media Title	Topic Title	Language
14 December 2015	Государственная Телевизионная и Радиовещательная Компания «Санкт-Петербург» / <i>Public TV and broadcasting company Saint-Petersburg</i> http://www.rtr.spb.ru/	Кафедра ЮНЕСКО появится в Горном университете / <i>UNESCO Chair will be created at the University "Gorny"</i>	Russian
15 December 2015	Телеканал «ЭХО-ТВ» / <i>TV channel Ekho TV</i> http://vefire.ru/channel/echotv/	Заседание Научно-консультативного совета в Санкт-Петербурге / <i>Meeting of the UN SG's Scientific Advisory Board in St Petersburg</i>	Russian
14 December 2015	Телекомпания Волга ТВ / <i>Volga TV company</i> www.volga-tv.ru	В Петербурге наградят самых перспективных ученых в области зеленой химии / <i>The most promising scientists in the field of the Green chemistry will receive grants in St Petersburg</i>	Russian

3. Periodicals

Date	Media Title	Topic Title	Language
14 December 2015	«Российская газета» / <i>Daily newspaper Rossiyskaya gazeta</i> http://www.rg.ru/	Путин призвал мир объединиться в борьбе с незаконной торговлей ценностями / <i>Putin calls for consolidated efforts to fight against illicit trafficking worldwide</i>	Russian
14 December 2015	Независимая газета www.ng.ru	В Санкт-Петербурге пройдет заседание Научно-консультативного совета при генсеке ООН / <i>Next meeting of the UN SG's Scientific Advisory Board to be held in St Petersburg</i>	Russian
17 December 2015	«Московский комсомолец» / <i>Daily newspaper Moskovskiy Komsomolets</i> http://mk.ru/	Химия ради жизни / <i>Chemistry for life</i>	Russian

17 December 2015	Аргументы недели www.argumeni.ru	Прогресс с заботой о будущих поколениях / <i>Progress with concern of the future generations</i>	Russian
18 December 2015	«Парламентская газета» / <i>Weekly newspaper Parlamentskaya gazeta</i> https://www.pnp.ru/	Зеленая химия поможет сохранить природу / <i>Green chemistry will help to conserve nature</i>	Russian

4. Web media

Date	Media Title	Topic Title	Language
14 December 2015	Рамблер-новости / <i>Rambler-news</i> www.rambler.ru	В Санкт-Петербурге пройдет заседание Научно-консультативного совета при генсеке ООН / <i>Next meeting of the UN SG's Scientific Advisory Board to be held in St Petersburg</i>	Russian
14 December 2015	Интернет-газета «Галерная улица» / <i>Online newspaper Galernaya ulitza</i> http://www.galernaya.ru/	Члены научно-консультативного совета при ООН обсудили в Горном университете вопросы устойчивого развития человечества / <i>Members of UN Scientific Advisory Board discussed issues relating to sustainable development at the Mining University</i>	Russian
December 2015	Médiaterre Organisation International de la Francophonie http://www.mediaterre.org/	La science au cœur du développement durable et de l'Accord de Paris sur le climat, Selon le Conseil consultatif scientifique des Nations Unies	French
December 2015	El Sexenio http://www.elsexenio.com/	La ciencia, factor esencial para el acuerdo de París sobre el clima y el desarrollo sostenible, afirma la Junta de Aseso	Spanish

5. Official media (government authorities and organizations)

Date	Media Title	Topic Title	Language
14 December 2015	Президент России / <i>President of Russia</i> http://en.kremlin.ru/	Пленарное заседание Санкт-Петербургского международного культурного форума / <i>Plenary session of St Petersburg International Cultural Forum</i>	Russian
16 December 2015	Радио ООН / <i>UN Radio</i> http://www.unmultimedia.org/radio/russian	Генеральный секретарь ООН привлекает науку к решению глобальных проблем (Интервью с Академиком В.Фортовым) / <i>The UN Secretary-General calls on science to resolve global challenges</i>	Russian
17 December 2015	Российская академия наук / <i>Russian Academy of Science</i> www.ras.ru	Заседание Научно-консультативного совета при Генеральном Секретаре ООН / <i>Meeting of the UN Secretary-General's Scientific Advisory Board</i>	Russian
18 December 2015	Министерство иностранных дел РФ / <i>Ministry of Foreign Affairs of the Russian Federation</i> www.mid.ru	О четвертом заседании Научно-консультативного совета при Генеральном секретаре ООН, Санкт-Петербург, 13-17 декабря 2015 / <i>4th meeting of the UN Secretary-General's Scientific Advisory Board, St Petersburg, 13-17 December 2015</i>	Russian
4 December 2015	Научно-консультативный совет при Генеральном секретаре ООН / The UN Secretary-General's Scientific Advisory Board http://en.unesco.org/un-sab/	Ведущие ученые разработают научные подходы к решению глобальных проблем Leading scientists to define the requirements and potential of science in addressing global challenges <u>Des scientifiques de renom se réunissent pour définir les besoins scientifiques permettant de faire face aux défis mondiaux</u>	Russian English French
14 December 2015		Генеральный секретарь ООН призвал ведущих ученых предложить свои решения в интересах обеспечения амбициозной стратегии низкоуглеродного устойчивого развития UN Secretary calls on leading scientists to offer solutions for ambitious, low carbon sustainable development <u>Le Secrétaire général de l'ONU appelle d'éminents scientifiques à se tourner vers l'avenir et proposer des solutions</u>	Russian English French

17 December 2015		Согласно Научно-консультативному совету, наука занимает центральное место в устойчивом развитии и Парижском соглашении по климату Science, central to Paris Climate Agreement and Sustainable Development, says UN's Scientific Advisory Board	Russian English
15 December 2015	International Knowledge Centre for Engineering Sciences and Technology under the Auspices of UNESCO www.ikcest.org	UN Secretary-General calls on leading scientists to offer solutions for ambitious, low carbon sustainable development	English
15 December 2015	Национальный Минерально-сырьевой Университет «Горный» / <i>National Mineral Resources University "Gorny"</i> www.spmi.ru	Члены Научно-консультативного совета при ООН обсудили в Горном университете вопросы устойчивого развития человечества Members of UN Scientific Advisory Board discuss the issues of sustainable development at the Mining University	Russian English
December 2015	Leopoldina Nationale Akademie der Wissenschaften http://www.leopoldina.org/en/	Science, central to Paris Climate Agreement and Sustainable Development, says UN's Scientific Advisory Board	English
6 January 2016	Global Young Academy http://globalyoungacademy.net	GYA Co-Chair Eva Alisic at 4 th meeting of the UN Secretary General's Scientific Advisory Board	English
December 2015	Global Environmental Governance Project at the Center for Governance and Sustainability – University of Massachusetts Boston http://environmentalgovernance.org/event/	4 th Meeting of UN Scientific Advisory Board in St. Petersburg	English