

United Nations Educational, Scientific and Cultural Organization

> Organisation des Nations Unies pour l'éducation. la science et la culture

Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura

Организация Объединенных Наций по вопросам образования, науки и культуры

منظمة الأمم المتحدة للتربية والعلم والثقافة

联合国教育、・



Towards Knowledge Societies for Peace and Sustainable Development First WSIS+10 review meeting



CONCEPT NOTE

High-Level Session

World Summit on the Information Society Review Meeting (WSIS+10)

科学及文化组织 . Using e-Science to Strengthen the Interface between Science, Policy and Society

UNESCO Headquarters Paris Room II

26 February 2013

(9:30-12:30)

Background

Increasingly, scientific research is being conducted by researchers from different disciplines, laboratories, organizations, and geographical regions and sometimes it involves citizens¹. One definition is that e-Science involves activities that use a wide range of resources, including networks, scientific instruments, databases and software components, as well as working with a wide range of people, to enhance scientific endeavour through global collaborations in which information and computing technology plays a vital role². e-Science connects communities and provides valid and timely information that can influence decision-making in civil society, businesses, governments and parliaments. e-Science also encourages the democratization of science by facilitating the increased participation of society including marginalized segments of society, women and girls, indigenous peoples, and particular countries such as Least Development Countries (LDCs). UNESCO is committed to promoting e-Science and the WSIS+10 Review Meeting provides a great opportunity for the organization to showcase how its commitment complements its science policy function.

At the United Nations Conference on Sustainable Development (2012), the UN Secretary-General, Ban Ki-moon, announced the creation of an International Scientific Advisory Board, for which UNESCO will lead and provide a secretariat. The Secretary-General also announced the establishment of The High-level Panel of Eminent Persons on the Post-2015 Development Agenda to advise on the global development agenda beyond 2015 (the target date for the Millennium Development Goals (MDGs). Both decisions reflect the United Nation's stance on; facilitating a global coordinated approach at the highest level to ensure sustainability, emphasizing the role of the sciences in this process and improving the interface between science, policy and society.

¹8th IEEE International Conference on e-Science 2012, Chicago, USA 8-12 October http://www.ci.uchicago.edu/escience2012/



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Establishing a web-based platform to support decision-making in science policy

The creation of an integrated web-based platform (Wikipedia type) is included in the vision for the establishment of the Advisory Board. The platform will be a key pillar in ensuring the Advisory Board's function of encouraging the science, policy and society interface. It will provide access to crucial multidisciplinary information on current and important issues such as climate change and on the loss of biodiversity and ecosystem services and its implications on issues such as food, water, and energy. The platform will encourage scientists and scientific institutions around the world to share data and the results of international scientific assessments/reports. and provide decision-makers in government, the private sector and civil society with easy access to a 'one-stop shop' of crucial relevant peer-reviewed and synthesized information that can inform policy decisions. It will also present scientific findings in a more simplified and user friendly manner for the general public and address issues such as the gap in accessing information between scientists and decision-makers from developing and developed countries.

Using ICTs to support societal participation in science and science policy

New trends in Science, Technology and Innovation (STI) enable Information Communication and Technology (ICT) applications to better meet the changing needs of society. This is the case with respect to as "citizen science", using the internet and mobile technologies to enable the participation of civil society and the public in the entire scientific process thus improving the lives of many communities. It ensures a more open and responsive scientific process and provides relevant and timely information for scientists and policy-makers. This collective process involving hundreds or even thousands of laypeople provides valuable insights and contributes to the democratization of science. In exploring the added-value of e-science to the science- policy interface, it is important to consider the role that civil society and the public have in decision-making. This approach can contribute to making the science- policy related Post-2015 recommendations more inclusive.

Objectives of the meeting

UNESCO will be organizing a High-Level Meeting as a part of the WSIS+10 Review process to:

- I. Explore the steps involved in establishing a web-based platform that supports the interface between science, policy and society;
- II. Mobilize partners for the establishment of the platform;
- III. Explore emerging trends in e-Science;
- IV. Facilitate improved participation of civil society in Science, Policy, Society interface processes.

The discussions will also allow UNESCO to showcase how e-Science is being used to facilitate the work of existing programmes in UNESCO. The new web-based platform being proposed will complement and build on the outcomes and experiences of these programmes. It will also facilitate on-going intergovernmental and international processes such as the Intergovernmental Panel on Climate Change (IPCC), the Global Framework on Climate Service (GFCS) and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).



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FORMAT OF THE MEETING

The High-Level Meeting will consist of two main sessions (a Technical Working Group, and a High-Level roundtable);

i. The Technical Working Group (9:30- 11:00), will explore 'Emerging Trends in e-Science: Citizen Science, Mobile technologies and ICTs'. The purpose of this session is twofold; it will explore practices in e-Science with particular focus on youth led initiatives in LDCs; and brainstorm the role of a web-based information sharing platform in supporting decision making and promoting the science, policy, society interface. The meeting will also allow participants to look at how the communities involved in the science, policy, society interface will benefit from the platform and the importance of emerging trends in e-Science in facilitating this process.

e-Science is being used in many ways in different context and this session will explore some of these initiatives and how they advance the science, policy, and interface. This session will explore how improving knowledge exchange between scientists and laypeople will contribute to improved science society relations. The discussion will look at new innovations in e-Science in Developing Countries and the increasing involvement of civil society, including rural communities and indigenous peoples in the entire scientific process, such as establishing research agendas, research questions, methodologies and outputs. This session will showcase examples of emerging trends and assess future opportunities and needs with a view to developing post-2015 recommendations in science policy.

ii. The second session, (11:05-12:30) will be organized as a High-Level Roundtable on, 'Using E-Science to Strengthen the Interface between Science, Policy and Society.' The meeting will explore the opportunities and challenges of using e-Science to support decision making in science policy. This discussion will also look at the technical requirements for designing a webbased platform to support decision making in science policy. It will provide an opportunity to share experiences gained from developing similar platforms.

The session will allow the participating ministers and international specialists to share best practices and lessons learnt from the use of e-Science in their respective countries and regions particularly, as it relates to science policy processes. It will also provide an opportunity for ministers and initernational specialists to share their perspective on the proposal of creating a web-based platform to improve the science- policy and society interface. During this session, the participants will also be briefed on the main outcomes of the first session.