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Draft WSIS+10 Vision for WSIS Beyond 2015

С7. ICT Applications: E-Science

**1. Vision**

For the post-2015 era, we envision inclusive Knowledge Societies, in which e-Science will revolutionize science by changing: the way in which research is conducted; how the scientific agenda is defined; who participates in it; how the results and data are shared; the pace at which policymakers, scientists and individuals access knowledge; and who participates in the policy follow up of research outcomes. E-Science will improve the interface between policy, science and society by facilitating: more evidenced based policy actions; greater involvement of citizens in policy and scientific processes; more partnerships, better harmonized policy efforts and improved sustainability of outcomes.

**2. Pillars**

1. Improve access to Scientific assessments on climate change, biodiversity and ecosystem services and agriculture by creating a web-based platform (with complementary mobile applications) based on a multidisciplinary knowledge system that critically reviews and synthesize new knowledge in as a real time as possible.
2. Use e-science to promote data and knowledge exchange, provide relevant and timely information for citizens, scientists and policy-makers that will improve decision making, science, policy and society relations and standards of living, particularly for marginalized communities.
3. Strengthen policy and programme activities in Citizen Science by encouraging the use of the internet and mobile technologies to facilitate greater participation of civil society in the entire scientific process.
4. Facilitate more public and private partnerships to promote e-science in the post 2015 development agenda.

**3. Targets**

1. Promote greater involvement of marginalized segments of society, particularly youth and indigenous peoples, in citizen science.
2. Indicator: Percentage of target population actively engaging in citizen science activities.
3. Indicator: Percentage of UNESCO- led or supported citizen science initiatives.
4. Indicator: Percentage of e-science activities with gender or age focus.
5. Establish a web-based platform to improve access to Scientific Assessments on climate change, biodiversity and ecosystem services and agriculture.
6. Indicator: Web-based platform with mobile applications created and functional.
7. Indicator: Number of users of the platform.
8. Indicator: Number of gender focused policy options included in assessments.

**Annex: Zero Draft Stakeholder Contributions**

1. Strengthen efforts **in Citizen Science** by encouraging the use of the internet and mobile technologies to facilitate greater participation of civil society and the public in the entire scientific process.
2. Use e-science to provide relevant and timely information for scientists and policy-makers that will improve decision **making, science, policy and society relations** and standards of living of many communities.
3. Support e-science policies that facilitating greater inclusion of isolated and marginalized groups in science and policy processes.
4. Use E-Science to develop more **applications** in sectors such as natural disasters, agriculture, water security, health, poverty, education, research and innovation and intellectual property to meet society’s needs.
5. Improve access to Scientific assessments on climate change, biodiversity and ecosystem services and agriculture by creating **a web-based platform (with complementary mobile applications)** based on a multidisciplinary knowledge system that critically reviews and synthesize new knowledge in as a real time as possible.
6. Strengthen support for Online National libraries for students and teachers and Information Networks for researchers. These networks should facilitate the exchange of ideas and scientific information between universities and schools.
7. **Integrate e-science strategies** with other e-strategies such as e-learning, e-education and e-business to facilitate more multi-stakeholders’ and multidisciplinary projects.
8. Provide more affordable and reliable high-speed Internet connection for all universities and research institutions, digitization of libraries and documents, free access to databases and training for information gathering, processing and research to strengthen the establishment of a genuine knowledge society.
9. Promote infrastructure development that will facilitate creation of more local content on the internet.
10. Operationalize the **use of e-science for science technology and innovation (STI)** to be effectively used to achieve the **MDGs and all internationally agreed development goals**
11. Improve efforts in Cyber Science Infrastructure (CSI) (a form of infrastructure that shares all resources (computer, human resources) and data on a high-speed network) in order to conduct research activities.
12. Encourage the use of Robots particularly in post disasters situations. ICT’s can facilitate remote operation of robots during large scale or specific disasters in which people are unable to access disaster site.
13. Promote exchange of information between peers, investigation centers and universities, on a national, regional and global basis, in order to enhance knowledge sharing.
14. Provide greater access to scientific information and researchers for educational purposes and for increased innovation and economic growth
15. Endorse **research and development** that focus on future trends of information communication society
16. Facilitate improved coordination of ICT strategies and the results of research and development of various cutting-edge technologies for example establishing international network hubs for each area of globally-advanced science technology to coordinate with the world’s most advanced research communities.
17. **Improve access to open source software and peer-to-peer technology particularly for developing countries to encourage knowledge sharing.**
18. Create national strategies for improving and **expanding science education**, through e-learning particularly in local languages and scripts.
19. **Encourage the development of different applications using e-science which will facilitate more innovative and scientific solutions to a variety of challenges and sectors.**
20. Develop **a web-based platform in support of policy and for the benefit of science and society**. This platform will allow open and free access to scientific knowledge and allow countries to optimize their capacities to use e-Science to pursue their development and learning objectives.