## Science and Technology in Society (STS) *forum* 8th Annual Meeting

October 4, 2011 (Embargo until 12:30)

## Kyoto, Japan

## **STATEMENT**

- 1. The 8<sup>th</sup> Annual Meeting of the Science and Technology in Society forum took place from October 2 to 4, with the participation of 800 global leaders in science and technology, policy, business and media from approximately 80 countries, regions and international organizations.
- 2. The March 11 earthquake, tsunami and the Fukushima Nuclear Power Station accident caused severe shocks to Japan. The entire world admired the poise, resilience and dignity with which the people of Japan confronted these disasters. The Fukushima accident has focused attention on the question of how to deal with nuclear power for the future of humanity. We decided to raise "Energy and Environment" and "Nuclear Safety and Future Development" to the top of the agenda of this year's forum.
- 3. Any future energy supply should include a wide range of options that adhere to the best standards of safety and environmental and social compatibility and are available at competitive prices. Different countries may choose different paths to an energy-secure future. Nuclear energy will continue to play a significant role for the foreseeable future. Strengthening nuclear safety measures is crucially important and addressing nuclear security is vital. We agreed that it is necessary to strengthen international cooperation on these issues.
- 4. In the area of global health problems, research into genomic and regenerative medicine has been developing very rapidly. Under these conditions, research into personalized and preventive medicine should also be accelerated. Capacity for dealing with infectious diseases as well as non-communicable diseases in developing countries must be strengthened. A new international system is needed for better collaboration between industry, the public sector and the WHO.
- 5. The aging of the population poses special challenges and opportunities, not just in providing geriatric care or social safety nets, but also in rethinking the social context of the participation of the elderly as productive citizens. Science and technology have crucial roles to play in improving the quality of later life.
- 6. More than half the world's population is already living in cities, and urbanization is growing rapidly, which raises a variety of challenges and opportunities. We must promote more livable and humane urban environments with efficient "smart cities" using science and technology and urban planning, and involving the citizens themselves.
- 7. To feed a world of 9-10 billion people and abolish the hunger that blights our earth, we need to promote better agriculture to deal with growing populations, changing diets and maintaining the environment. R&D is needed for more nutritious and more resilient crops, better farming systems, ecosystem management and reduction of wastage. Agricultural biotechnology, including genetically modified organisms, should contribute to these improvements. Balanced nutrition, especially for mothers and newborns, enhances health and reduces mortality.
- 8. Unlike the oceans, there is some global attention, albeit insufficient, being given to fresh water and forest conservation issues. We therefore proposed establishing an international body to champion ocean issues and to frame and focus ocean policies. This body is expected to collaborate with the prominent ocean science and policy communities to expedite knowledge translation and exchange to advance ocean policies globally.

- Creating an effective ICT infrastructure is critical for reducing disparities among and within nations in access to education, healthcare and business opportunities. In a rapidly changing information and communication technology environment, rethinking cybersecurity and privacy has become crucially important for the future of ICT.
- 10. Nanotechnology will play a vitally important role in various fields including electronics, medicine, life science and materials. We should make positive use of nanotechnology as a potential technology to explore new frontiers.
- 11. Collaboration among academia, industry and government is essential for maintaining economic and social vitality. Universities and research institutions should provide basic research and advanced results of R&D to stimulate innovation, as well as science and engineering education. Universities are the hub that links the humanities and science, promoting critical thinking and preparing students to be responsible global citizens.
- 12. The Academies of Engineering Presidents met at the STS forum at the first time this year. The Academies of Engineering are expected to strengthen the bridges between science and technology and society.
- 13. We reaffirmed the need to promote science diplomacy to enhance relations between science communities across national boundaries, thereby creating new avenues of dialogue and understanding between nations.
- 14. Funding agencies should finance international science collaboration programs promoting multilateral arrangements, especially on global issues. Supporting education, research and local entrepreneurship is essential for capacity-building in developing countries.
- 15. The adjunct session on Regional Climate Change reviewed best practices of how knowledge action networks mobilized science, community and decision-makers to take local actions. Such knowledge action networks should be organized in all places threatened by the negative impacts of climate change.
- 16. We noted the importance of objective scientific evidence-based reporting by the media as well as better communication by scientists and their institutions in dealing with the lights and shadows of science and technology with regard to public policy issues. It is vital to stimulate continuing dialogues between scientists and the media.
- 17. To solve the serious problems of humankind, science and technology will not be sufficient without significant changes in individual and social behavior. The social sciences, humanities and social innovations have an important role to play in this area. Public education will be needed to promote awareness about the need for more efficient use of finite resources.
- 18. Humanity's continued existence and prosperity on this globe depend on sustainability. This means living in harmony with nature and is of the utmost importance for humankind. We will therefore continue to focus on sustainability as a major theme of the STS *forum*.
- 19. The value of the STS-sponsored ongoing exchange of views on science and technology issues among various stakeholders and global leaders has made it clear that the STS forum has developed from simply a conference into a movement.
- 20. We look forward to meeting here again to contribute to building a better future for humankind. We agreed to hold the 9th Annual Meeting of the STS *forum* in Kyoto from Sunday, October 7 to Tuesday, October 9, 2012.