## Science and Technology in Society forum

4<sup>th</sup> Annual Meeting October 9, 2007 (Embargo until 12:00 noon) Kyoto, Japan

## **STATEMENT**

1. The 4<sup>th</sup> Annual Meeting of the Science and Technology in Society *forum* was held from October 7-9, with the participation of over 600 leading scientists, policymakers, business executives and media leaders from 71 countries, regions and international organizations. Prime Minister Yasuo Fukuda stressed the need to make the transition to a sustainable society through empowerment by science and technology.

This year's STS *forum* held discussions about science and technology under the main themes of "Harmony with Nature" and "Innovation." We agreed upon the following.

- 2. We recognized the importance of acting on climate change and agreed on the need to establish a new international framework which would replace the Kyoto Protocol, in which all countries will participate. The STS forum has been advocating this post-Kyoto process since 2004, and we highly value the fact that a consensus is shaping in the international community toward the participation of all countries. We expect further concrete dialogue to be conducted at the G8 summit and other international fora.
- 3. We believe it is necessary to make rapid progress in energy efficiency, and to further develop a broad range of clean alternative energy sources, in view of the expected increase in global energy needs and of environmental concerns. The use of nuclear fission power, under strict conditions of safety and non-proliferation, must play an increasingly important role. Furthermore, it is essential to invest in developing nuclear fusion power for the future.
- 4. Water, whether it is for drinking or for agriculture, is now one of the most pressing global issues we must deal with. We recognize that science and technology can contribute more for solutions to this crucial problem facing humankind.
- 5. Life sciences, particularly in the genome era, offer enormous promise to benefit humankind, though there are ethical concerns in some

applications. We recognize that research in this field, including international collaboration, is very active. In this regard, we feel it is desirable to establish international standards that will enable researchers all over the world to conduct research on an equal footing.

- 6. With increasing population, richer diets and the demand for biofuels, the food supply is facing a serious crisis. The best of science, including all the possibilities of the new biology, must be brought to bear on increasing agricultural productivity.
- 7. We shared the view that breakthroughs in nanotechnology have the potential to significantly benefit humankind. However, their possible risks should be analyzed in advance and minimized.
- 8. We reached a consensus that further development of Information and Communications Technology (ICT) is necessary to build a thriving future for humankind. The recent surge in computational capabilities is expanding the reach of science further, and new applications may have a major impact on society. We endorse the need for an open Internet, and for effective measures and technologies to safeguard personal data.
- 9. Prevention of major infectious diseases through vaccine development and other means is vital for humankind's future and requires urgent action. In addition, we need mechanisms for effective vaccine distribution and information exchange, as well as surveillance and preparedness for future pandemics.
- 10. Joint research in developing countries should be encouraged with the participation of researchers and scientists from developed countries. A portion of official development assistance (ODA) should be used for this activity, to harness the human potential of developing countries in addition to the financial power of developed countries.

The STS *forum* recommends to the G8 countries that they discuss this proposal at their Summit meeting in 2008.

- 11. Intellectual property rights protection is essential to encourage new discoveries and their application. However, the current global system needs to be improved.
- 12. Universities, whose primary functions are educating students and advancing knowledge, should play an important role in contributing to socio-economic development by promoting innovation through business-academia-government collaboration.

- 13. Science and technology have become so advanced that some are inclined to think that humankind can control nature; however, we should not forget that humankind is part of nature, and that we should live in harmony with nature. While the application of science and technology may have negative aspects, we must recognize that there is no solution to these problems without further development of science and technology.
- 14. Innovation must be nurtured. It depends on creativity, which is enhanced by educational systems that encourage inquiry and research that explores unconventional ideas. New ideas emerging in basic and applied research in both private and public institutions should be transformed, whenever possible, into products that benefit society.
- 15. We agreed to hold the Fifth Annual Meeting of the STS *forum* in Kyoto from Sunday, October 5 to Tuesday, October 7, 2008. We look forward for all to join us then to pursue our endeavors to understand the lights and shadows of science and technology as we seek to harness new knowledge for a better future of humankind in harmony with nature.

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