





Draft WSIS+10 Vision for WSIS Beyond 2015

C7: ICT Applications E-Environment

Recognizing the central role of information and communication technologies (ICTs) in achieving sustainable development for implementation of WSIS Outcomes, in particular related to Action Line C7. Significant progress has been achieved and several emerging trends and challenges have been identified since the first summit in 2003.

The *Following* statements provide guidance and priorities for implementation of WSIS Action Line C7 beyond 2015.

- 1. Recognize the need for greater collaboration between the ICT community and the environmental, meteorological and other communities, at the national, regional and international levels, on programs and strategies for environmental issues, climate change, electronic waste management, and disaster risk reduction
- 2. Include stronger ICT reference to the main challenges related with environmental degradation, such as climate change.
- 3. Put greater emphasis on closing the life-cycle loop of ICTs and information sharing regarding policy, standards, consumer education, and design innovation.
- 4. Maintain a balance in addressing all goals under action line C7 e-environment to avoid singling out only one aspect.
- 5. Provide training emergency telecommunication Government and NGO disaster management units so when they receive such equipment, they know what to do.
- 6. Build partnerships with international association of amateur radio to train people at the national level on using amateur radio during disasters.
- 7. Develop awareness outreach programmes using ICTs to education people to become environmentally savvy e.g. do not burn rubbish as it emits carbon etc
- 8. Connect better with other action lines, in particular e-agriculture.
- 9. Using ICTs to save lives through the early warning systems which is an environment issue flooding is caused by cutting down the trees around rivers

- 10. Put more emphasis in measuring performance and establishing reduction goals and agreeing on a common set of methodologies concerning energy consumption.
- 11. Define goals and indicators for each action line, in particular establishing limits to the negative environmental impacts of the ICT sector.
- 12. Explore new models of financing the development and deployment of ICT
- 13. Encourage investment in climate and weather systems serving the development agenda.
- 14. Emphasize the need for cooperation between ICT and environmental sector at the national level.
- 15. Provide regulatory incentives to develop telecommunications in marginalized areas, including packaging urban projects with rural/remote area projects, in an effort to achieve universal service.
- 16. Raise awareness about the role of ICTs in supporting opportunities for society and nature through the expansion of a green economy, through elaborating e-environment as an element of e-education.
- 17. Strengthen dialogue and use more ICTs to communicate and engage with the civil society.
- 18. Identify mechanisms for strengthening the education aspect from the consumer perspective.
- 19. Encourage stakeholders to contribute to the stocktaking process, finding ways for benefitting from the lessons learned from these projects
- 20. Promote ICT innovative solutions for greening the environment
- 21. Address the issues of coverage, quality and affordability for people living in remote islands and rural areas so they too can have access to information on e-environment so they too may understand the green environment that is needed to combat climate change.
- 22. Educate all stakeholders in best ways to manage e-waste.
- 23. Implement national policies for ICT waste management;
- 24. Harmonized among countries and regions national policies for better management of ICT wastes
- 25. Support computerization and automation of processes to reach zero paper use
- 26. Promote technological solutions for environmental preservation and sustainability.
- 27. Develop cooperation between ICTs and the environmental sector at national level to address the negative effects of ICTs (Greening the ICT sector), an issue that has become more urgent since the WSIS process started
- 28. Use ICT equipment in the elaboration of electronic weather forecast models for the prevention of natural disasters
- 29. Seek to leverage the potential for carbon savings in other industrial sectors which may be available through ICTs.

- 30. Enhance the existing E-environment with E Planning Process through eenvironment tools for sustainable growth
- 31. Ensure ICT is used responsibly for environmental care and contribute significantly to cushion and reduce energy consumption and environmental pollution, as well as its impact on climate change
- 32. Create innovative solutions for sustainability for our natural environment and projects should be developed as multistakeholders' and multidisciplinary.
- 33. Develop a global common strategy for sustainable and beneficial e-environment related to the overall strategy for the protection of the environment.
- 34. Address adverse effects of increased use of ICT products to the environment and climate needs at a national/ regional and global level.
- 35. Use ICT equipment in the elaboration of electronic weather forecast models for the prevention of natural disasters.
- 36. Collect, refurbished and dismantled material recoveries that will provide opportunities to create green jobs as well as economic incentives in particular for the informal sector.
- 37. Seize the opportunity and implement effective solutions balancing business and environment in a sustainable way through collaboration between stakeholders, particularly industry and governments
- 38. Develop equipment that is designed to minimize e-waste through optimized use of electronics, longer life and easy and efficient disassembly.
- 39. Consider e-waste management as a multi-stakeholders approach and a part of integrated solid waste management building on the 3R concept (reduce, reuse and recycle), Life Cycle Assessment and Value Chain Assessment.
- 40. Find integrated solutions to e-waste and other solid waste management together with the local garbage community rather than the informal sector.
- 41. Seek to reduce the growth in waste and carbon emissions resulting from ICT
- 42. Optimize water usage through ICT-driven comprehensive management systems.
- 43. Utilize ICT effectively and efficiently for environment/climate change, ICT-driven environmental measures, smart grid, smart community, energy management through smart meters, and recycle technologies resulting in paperless offices
- 44. Focus on ways of mitigating the negative environmental impact of ICTs, as well as on their potential contribution to sustainable development.
- 45. Discuss and review the cataloguing of the Electric and Electronic Equipment(EEE), fostering the "local" labeling in each member country, determining if, for example, an EEE is really recyclable or environment-friendly, not only in its' origin but in the country of use/final destination.

- 46. Conduct research and studies about models on the treatment of EEE waste (WEEE) in developing countries.
- 47. Promote research on WEEE treatment and final disposal.
- 48. Design a data and information system about EEE composition.
- 49. Ensure manufacturers declare the components used (and %, weight or volume) in the EEE manufacturing process, in order to reduce research expenses for the controlling and environment monitoring bodies which will enable the design of more efficient WEEE treatment and final disposal models, specifically addressing the polluting elements contained .
- 50. Subscribe international agreements and encourage governments to include in their regulations laws obliging manufacturers to use certified methodologies and procedures, as well as quality standards based on, for instance, ISO standards to significantly reduce the EEE breakage rate and, therefore, the resulting WEEE volume.
- 51. Design a standardized environment control model that enables to detect, in terms of geography, possible WEEE centers, and ensure it is actually done under local regulations, because there is no international protocol.
- 52. Develop goals or international actions in the WSIS about the promotion of Cloud use. Matters such as vendors' trust and other issues still slow down the promotion and establishment of goals.
- 53. Develop strategies for people with disability during activating disaster evacuation because the deaf cannot hear the instructions while the blind cannot see where they are going.
- 54. Promote establishment of public private partnership in funding early warning systems in those countries on the receiving end of natural disasters regularly such as flooding etc.
- 55. Strengthen the capacity of meteorological offices in all developing counties to ensure critical information for preparedness when disasters that can be predicted approach e.g. the Sandy Cyclone.
- 56. Continue work in E-government, e-learning, e-health, e-employments, eenvironment, e-agriculture, and e-science taking into account the experience accumulated in these areas and opportunities for transversal project.
- 57. Establish a system that enables consumers to actively participate in energy management of demand and supply of electricity, such as "demand response" in which consumers can choose their own demand based on conditions of suppliers such as diffusion of smart meters.

- 58. Enhance diffusion of effective and stable energy management that utilizes "demand response"
- 59. Promote the use of ICT to minimuze traffic accidents and traffic jams and a safe, lowenvironmental-load and economical road transportation society through utilization of Intelligent Transport Systems (ITS) technologies with which vehicle and vehicle, road and vehicle, and vehicle and human can mutually and in timely form change information; people can use geographical information (G-space information) such as map information and location information on vehicles and people and utilize accumulated data.
- 60. Avoid and minimize e-waste in order to protect workers health and the environment which producers, service providers, users and regulatory authorities must recognize as essential parts of the ICT equipment life-cycle management.
- 61. Identify ICT equipment that makes more efficient use of resources in particular equipment that are designed for longer life, for easy and effective dismantling and recovery of valuable parts.
- 62. Develop equipment that is designed to minimize e-waste through optimized use of electronics, longer life and easy and efficient disassembly.
- 63. Consider e-waste management as a multi-stakeholders approach and a part of integrated solid waste management building on the 3R concept (reduce, reuse and recycle), Life Cycle Assessment and Value Chain Assessment.
- 64. Reduce ICT contribution towards environmental harm, in particular in relation to electronic waste, including toxic waste, and in relation to the carbon emissions that are among the causes of climate change.
- 65. Continue work on Climate Change, e-waste, ICT Green Standards.
- 66. Encourage the sustainable grow through e-environment tools.
- 67. Enhance the existing E-environment with E Planning Process
- 68. Treat e-waste in a n environmental friendly way.
- 69. Ensure the ICT industry require more energy-efficient solutions
- 70. Contribute significantly to cushion and reduce energy consumption and environmental pollution, as well as its impact on climate change.
- 71. Focus on ways of mitigating the negative environmental impact of ICTs, as well as on their potential contribution to sustainable development.