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**Committee on the Peaceful  
Uses of Outer Space  
Fifty-third session  
Vienna, 9-18 June 2010****Draft report****Chapter II****Recommendations and decisions****E. Spin-off benefits of space technology: review of current status**

1. The Committee considered the agenda item entitled “Spin-off benefits of space technology: review of current status”, in accordance with General Assembly resolution 64/86.
2. The representatives of China, Germany, India, Japan and the United States made statements under the item.
3. The Committee heard the following presentations:
  - (a) “JAXA industrial collaboration”, by the representative of Japan;
  - (b) “NASA technologies: for the benefit of all mankind”, by the representative of the United States;
  - (c) “Fifth Space Conference of the Americas: regional space cooperation for security and human development; perspective for the future”, by the representative of Ecuador.
4. The publication *Spinoff 2009*, submitted by the National Aeronautics and Space Administration (NASA) of the United States, was made available to the Committee.
5. The Committee took note of the information provided by States on their national practices regarding spin-offs of space technology that had resulted in the introduction of useful innovations in various scientific and practical areas of civil society, such as medicine, biology, chemistry, astronomy, agriculture, aviation, land transport, firefighting, protection of nature and energy.



6. The Committee agreed that spin-offs of space technology constituted a powerful engine for technological innovation and growth in both the industrial and service sectors and could be beneficially applied to achieve social and humanitarian objectives and the development of national communications infrastructure, and in projects aimed at achieving the goal of sustainable development.
7. The Committee agreed that spin-offs of space technology should be promoted because they fostered innovative technologies, thus advancing economies and contributing to the improvement of the quality of life.
8. The Committee noted that Governments of Member States had successfully involved the private sector and academia in various projects in the area of spin-offs of space technology.
9. The Committee agreed to continue its consideration of the item at its fifty-fourth session, in 2011.

## **F. Space and society**

10. The Committee considered the agenda item entitled “Space and society”, in accordance with General Assembly resolution 64/86. The Committee focused its discussions on the theme “Space and education”.
11. The representatives of Canada, China, Colombia, India, Japan, the Libyan Arab Jamahiriya, Nigeria, the Syrian Arab Republic, the United States and Venezuela (Bolivarian Republic of) made statements under the item. Representatives of other member States also made statements relating to this item during the general exchange of views. The observer for UNESCO also made a statement.
12. The Committee heard the following presentations:
  - (a) “Italian Master in space policy and institutions”, by the representative of Italy;
  - (b) “Bringing space to Canadian classrooms”, by the representative of Canada;
  - (c) “Building peace in young minds through space education: contributions of JAXA Space Education Centre to human development”, by the representative of Japan;
  - (d) “Fifty years of operational environmental satellites: the US experience”, by the representative of the United States;
  - (e) “Space education: international outreach activities of India”, by the representative of India;
  - (f) “International Year of Astronomy 2009: achievements, legacy and way forward”, by the observer for UNESCO;
  - (g) “The Space Generation Congress 2009: perspectives from university students and young professionals in the space sector”, by the observer for SGAC.

13. The Committee noted the information provided by States on their actions and programmes aimed at attracting young people to the field of space by making them aware of the importance and significance of space science, technology and applications.
14. The Committee agreed that it was important for States to ensure that space-related educational programmes remained relevant to youth and that States should collaborate closely in this area so that youth would benefit from understanding the interconnectivity among States and the present and future challenges facing humankind.
15. The Committee noted the beneficial uses of space applications for society and their increasing use by developing countries as tools to achieve development goals in such areas as telemedicine, eradication of illicit crops and land planning.
16. The Committee noted the important role of space education in inspiring students to pursue careers in science, technology, engineering and mathematics, in strengthening national capabilities in science and industry and in enhancing educational opportunities through the use of distance-learning technologies such as tele-education and e-learning.
17. The Committee noted with satisfaction that, at the global level, a large number of outreach activities and programmes for children, young people and the general public were being established by national space and educational organizations and international organizations to promote awareness of the benefits of space science and technology and to encourage children to consider careers in mathematics and science.
18. The Committee noted that World Space Week, observed from 4 to 10 October each year pursuant to General Assembly resolution 54/68, contributed to the development of education and provided an important opportunity to sensitize youth and the general public to the benefits of space science and technology.
19. The Committee noted that the General Assembly, in its resolution 62/200, had declared 2009 International Year of Astronomy and that a number of States used the Year to highlight the importance of space science and technology and to strengthen international cooperation in space education. A number of successful initiatives were reported, such as dedicated national websites, software programs, special issues of scientific magazines, television broadcasts, stamps, poster contests and several coordinated initiatives among partners from government, academia and civil society.
20. The Committee noted the activities carried out at the regional level for capacity-building through education and training in space science and technology applications for sustainable development.
21. The Committee noted with appreciation the role of regional centres for space science and technology education, affiliated to the United Nations, in space-related education.
22. The Committee noted the role played by the International Space Station in education and in reaching out to education communities worldwide.
23. The view was expressed that the Committee and its subsidiary bodies continued to play a substantial role in providing a global framework for the

systematic exchange of experience and information, as well as in the coordination of capacity-building efforts, as reflected in the Plan of Action of the Committee endorsed by the General Assembly in its resolution 59/2.

24. The view was expressed that, while the exchange of information and experiences on a variety of initiatives relating to space education had been important and should continue, it could also be useful to focus the efforts of the Committee on a few specific priority areas that could have a greater impact on the enhancement of space education, such as sharing challenges that States encountered in expanding and promoting space education activities.

25. The Committee agreed that, as recommended by the Working Group of the Whole at the forty-seventh session of the Scientific and Technical Subcommittee (A/AC.105/958, para. 55 and annex 1, para. 9) the issue of promoting the greater participation of young people in space science and technology would be considered by the Committee under the item “Space and society”.

26. The Committee agreed that, in view of the importance of the theme “Space and education”, it would continue to consider the special theme at its fifty-fourth session, in 2011.

## **G. Space and water**

27. The Committee considered the agenda item entitled “Space and water”, in accordance with General Assembly resolution 64/86.

28. The representatives of China, Germany, India, Japan and the Syrian Arab Republic made statements under the item. Representatives of other member States also made statements relating to this item during the general exchange of views.

29. The Committee heard a presentation entitled “Mission objectives and current status of GOSAT (IBUKI)”, by the representative of Japan.

30. In the course of the discussions, delegations reviewed national and cooperative water-related activities, giving examples of national programmes and bilateral, regional and international cooperation.

31. The Committee noted that many States were confounded by the broad spectrum of serious water-related issues — ranging from lack of water, and the resulting impact on populations and food production, to overabundance of water, causing floods and destruction — which constitute a significant threat to the sustainable development of a human society.

32. The Committee noted that space-derived data were used extensively in water management and that space technology and applications played an active role in addressing most water-related issues.

33. The Committee noted that space technology and its applications had growing potential to provide useful information for scientific research on water-related issues and to support water management and policy- and decision-making with a view to efficient and sustainable use of water resources.

34. The Committee further noted that space technology could be used in combination with non-space technologies to contribute to the observation of global

water cycles and the monitoring and mitigation of the effects of flood, drought and earthquake disasters, and to improve the timeliness and accuracy of forecasts.

35. The Committee agreed to continue its consideration of the item at its fifty-fourth session, in 2011.

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