

## THIRD UNITED NATIONS CONFERENCE ON THE EXPLORATION AND PEACEFUL USES OF OUTER SPACE

## The Space Millennium: Vienna Declaration on Space and Human Development\*

The States participating in the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III), held in Vienna from 19 to 30 July 1999,

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*Reaffirming* the aims and principles of the Charter of the United Nations, the principles of international law and the relevant resolutions of the General Assembly,

*Having in mind* that humans have always gazed at the sky with wonder and that from such was born the curiosity that drove early astronomers to study the movements of celestial bodies, from which the foundations of modern space science and technology were laid,

Recognizing the importance of space science and space applications for the fundamental knowledge of the universe, education, health, environmental monitoring, management of natural resources, disaster management, meteorological forecasting and climate modelling, satellite navigation and communications, and the major contribution that space science and technology make to the well-being of humanity and specifically to economic, social and cultural development,

Considering that space transcends national boundaries and interests, permitting the development of global solutions to address common challenges and providing a vantage point from which to view planet Earth,

*Noting* the positive developments in international relations since the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space, held in Vienna from 9 to 21 August 1982, <sup>1</sup>

*Reaffirming* the common interest of all humanity in the progress of the exploration and use of outer space for peaceful purposes, and convinced of the need to prevent an arms race in outer space as an essential condition for the promotion of international cooperation in this regard,

*Recognizing* that outer space should be the province of all humankind, to be utilized for peaceful purposes and in the interests of maintaining international peace and security, in accordance with international law, including the Charter of the United Nations and as proclaimed in the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies,<sup>2</sup>

*Reaffirming* General Assembly resolution 51/122 of 13 December 1996, entitled "Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries",

*Recognizing* that the orderly conduct of space activities is beneficial to all countries, whether or not they have already become active in space research or have started to utilize space applications, and that active support for space activities is expressed in the observance by States and by international organizations of the provisions of the outer space treaties,

Noting with satisfaction that the United Nations conferences on the exploration and peaceful uses of outer space were held in Vienna in 1968 and in 1982, leading to many new initiatives, including the creation of the United Nations Programme on Space Applications and the establishment of regional centres for space science and technology education, affiliated to the United Nations, which are contributing to a better understanding of space technology and to capacity-building in the utilization of space technology at the local level for social and economic development,

Noting the benefits and applications of space technologies in addressing the unprecedented challenges to

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<sup>\*</sup> Adopted by the Conference at its 10th plenary meeting, on 30 July 1999.

sustainable development, and noting also the effectiveness of space instruments for dealing with the challenges posed by the pollution of the environment, depletion of natural resources, loss of biodiversity and the effects of natural and anthropogenic disasters,

*Recognizing* that significant changes have occurred in the structure and content of world space activity, as reflected in the increasing number of participants in space activities at all levels and the growing contribution of the private sector to the promotion and implementation of space activities,

*Recognizing also* that the use of space technology should be in accordance with the principles set out in Agenda 21<sup>3</sup> for the benefit of all nations and peoples and that its applications should be extended to developing countries,

*Recognizing further* the role played in recent years in the field of space by the Committee on the Peaceful Uses of Outer Space, as well as the role of States in the formulation of policies and implementation of international cooperation in that field,

*Realizing* that the above-mentioned challenges can be met for the benefit of all humanity by considering the mutual interests of all parties, sharing space knowledge and resources, coordinating missions and projects between interested States and strengthening international cooperation in the exploration and peaceful uses of outer space,

Convinced that efforts should be undertaken to facilitate substantive joint projects between "space-faring" and "non-space-faring" countries, as well as among developing countries, which could result in the undertaking of projects that are beyond the means of individual countries,

*Taking note with satisfaction* of the valuable contributions of participants of the Technical Forum and the Space Generation Forum to the work of UNISPACE III,

- 1. Declare the following as the nucleus of a strategy to address global challenges in the future:
- (a) Protecting the Earth's environment and managing its resources: action should be taken:
  - (i) To develop a comprehensive, worldwide, environmental monitoring strategy for longterm global observations by building on existing space and ground capabilities, through the coordination of the activities of various entities and organizations involved in such efforts;
  - (ii) To improve the management of the Earth's natural resources by increasing and facilitating the research and operational use of remote sensing data, enhancing the coordination of remote sensing systems and increasing access to, and the affordability of, imagery;
  - (iii) To develop and implement the Integrated Global Observing Strategy so as to enable access to and the use of space-based and other Earth observation data;
  - (iv) To enhance weather and climate forecasting by expanding international cooperation in the field of meteorological satellite applications;
  - (v) To ensure, to the extent possible, that all space activities, in particular those which may have harmful effects on the local and global environment, are carried out in a manner that limits such effects and to take appropriate measures to achieve that objective;
- (b) Using space applications for human security, development and welfare: action should be taken:
  - (i) To improve public health services by expanding and coordinating space-based services for telemedicine and for controlling infectious diseases;
  - (ii) To implement an integrated, global system, especially through international cooperation, to manage natural disaster mitigation, relief and prevention efforts, especially of an international nature, through Earth observation, communications and other space-based services, making maximum use of existing capabilities and filling gaps in worldwide satellite coverage;
  - (iii) To promote literacy and enhance rural education by improving and coordinating educational programmes and satellite-related infrastructure;
  - (iv) To improve knowledge-sharing by giving more importance to the promotion of universal access to space-based communication services and by devising efficient policies, infrastructure, standards and applications development projects;
  - (v) To improve the efficiency and security of transport, search and rescue, geodesy and other activities by promoting the enhancement of, universal access to and compatibility of space-based navigation and positioning systems;

- (vi) To assist States, especially developing countries, in applying the results of space research with a view to promoting the sustainable development of all peoples;
- (c) Advancing scientific knowledge of space and protecting the space environment: action should be taken:
  - (i) To improve the scientific knowledge of near and outer space by promoting cooperative activities in such areas as astronomy, space biology and medicine, space physics, the study of near-Earth objects and planetary exploration;
  - (ii) To improve the protection of the near-Earth space and outer space environments through further research in and implementation of mitigation measures for space debris;
  - (iii) To improve the international coordination of activities related to near-Earth objects, harmonizing the worldwide efforts directed at identification, follow-up observation and orbit prediction, while at the same time giving consideration to developing a common strategy that would include future activities related to near-Earth objects;
  - (iv) To protect the near and outer space environments through further research on designs, safety measures and procedures associated with the use of nuclear power sources in outer space;
  - (v) To ensure that all users of space consider the possible consequences of their activities, whether ongoing or planned, before further irreversible actions are taken affecting future utilization of near-Earth space or outer space, especially in areas such as astronomy, Earth observation and remote sensing, as well as global positioning and navigation systems, where unwanted emissions have become an issue of concern as they interfere with bands in the electromagnetic spectrum already used for those applications;
- (d) Enhancing education and training opportunities and ensuring public awareness of the importance of space activities: action should be taken:
  - (i) To enhance capacity-building through the development of human and budgetary resources, the training and professional development of teachers, the exchange of teaching methods, materials and experience and the development of infrastructure and policy regulations;
  - (ii) To increase awareness among decision makers and the general public of the importance of peaceful space activities for improving the common economic and social welfare of humanity;
  - (iii) To establish and/or strengthen national mechanisms to coordinate the appropriate development of space activities and foster the participation of all the sectors concerned;
  - (iv) To improve the sharing of information on and use of spin-offs from space activities, in particular between developed and developing countries, by making use of appropriate communications technologies;
  - (v) To encourage all States to provide their children and youth, especially females, through appropriate educational programmes, with opportunities to learn more about space science and technology and their importance to human development and to participate fully in activities related to space science and technology, as an investment in the future;
  - (vi) To create, within the framework of the Committee on the Peaceful Uses of Outer Space, a consultative mechanism to facilitate the continued participation of young people from all over the world, especially young people from developing countries and young women, in cooperative space-related activities;
  - (vii) To consider the creation of awards to recognize outstanding contributions in space activity, in particular for youth;
- (e) Strengthening and repositioning of space activities in the United Nations system: action should be taken:
  - (i) To reaffirm the role of the Committee on the Peaceful Uses of Outer Space, its two subcommittees and its secretariat in leading global efforts for the exploration and peaceful use of outer space relating to significant global issues;
  - (ii) To assist in the improvement of the capacity-building process in developing countries and countries with economies in transition by emphasizing the development and transfer of knowledge and skills, by ensuring sustainable funding mechanisms for the regional centres for space science and technology education, affiliated to the United Nations, by enhancing support

for the United Nations Programme on Space Applications through the provision of adequate resources, and by participating in the implementation of the new strategy of the Programme arising from UNISPACE III;

- (iii) To encourage the increased use of space-related systems and services by the specialized agencies and programmes of the United Nations system and by the private sector around the world, where appropriate, in order to support United Nations efforts to promote the exploration and peaceful uses of outer space;
- (iv) To promote the efforts of the Committee on the Peaceful Uses of Outer Space in the development of space law by inviting States to ratify or accede to, and inviting intergovernmental organizations to declare acceptance of, the outer space treaties<sup>4</sup> developed by the Committee and by considering the further development of space law to meet the needs of the international community, taking into particular account the needs of developing countries and countries with economies in transition;
- (v) To further consider the agenda structure and working methods of the Committee on the Peaceful Uses of Outer Space and its two subcommittees to better reflect issues of global concern, including international cooperation in space activities, taking into particular account the needs of developing countries and countries with economies in transition, as set out in the report of the Committee on its fortieth session;<sup>5</sup>
- (vi) To strengthen the coordination of mutually beneficial activities between the Committee on the Peaceful Uses of Outer Space and other United Nations entities;
- (f) Promoting international cooperation: action should be taken to follow up the decision by the States participating in UNISPACE III:
  - (i) To take note of the recommendations of the regional preparatory conferences for Africa and the Middle East, for Asia and the Pacific, for eastern Europe and for Latin America and the Caribbean that are relevant to efforts made at the global and regional levels, as set forth in sections A and B, respectively, of the annex to the present Declaration, and to call upon the international community, to the extent feasible, to consider those recommendations in appropriate forums;
  - (ii) To establish a special voluntary United Nations fund for the purpose of implementing the recommendations of UNISPACE III, in particular the activities of the regional centres for space science and technology education, taking into account the recommendations of the regional preparatory conferences. All States should be invited to support the fund financially or in kind in an annual letter from the Secretary-General that will, *inter alia*, identify priority project proposals for enhancing and assisting technical cooperation activities, in particular for human resource development. The Secretariat will provide annually to the Committee on the Peaceful Uses of Outer Space a report listing those States which have responded to the Secretary-General's invitation;
  - (iii) To adopt measures aimed at identifying new and innovative sources of financing at the international level, including in the private sector, in order to support the implementation of the recommendations of UNISPACE III in developing countries;
  - (iv) To encourage all States and international organizations to strengthen their efforts in promoting the peaceful uses of outer space for the benefit and in the interest of all States, taking into particular account the interest of developing countries and countries with economies in transition, by facilitating programmes and activities between "space-faring" and "non-space-faring" countries, as well as among developing countries, and involving civil society, including industry;
- 2. Recognize the tremendous achievements of space science and technology to date, look forward with confidence to achieving even greater progress in the future, and stress the vital importance of attaining the goals and executing the actions outlined above and described in detail in the report of UNISPACE III;
- 3. *Emphasize* that the shared objective of sustainable development for all countries will require timely and effective action to achieve the stated goals and that such an endeavour will provide ample scope for space science and technology to play their proper role as major contributors to people's well-being;
- 4. *Recommend* to the General Assembly that it review and evaluate, within existing resources, the implementation of the recommendations of UNISPACE III after a period of five years, and thereafter as appropriate,

and that the reviews be based on preparatory work carried out by the Committee on the Peaceful Uses of Outer Space, open to the participation of representatives of all Member States, and the specialized agencies of the United Nations system and observers;

5. *Recognize* that the promotion of bilateral, regional and international cooperation in the field of outer space must be guided by General Assembly resolution 51/122;

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*Recalling* that 4 October 1957 was the date of the launch into outer space of the first human-made Earth satellite, Sputnik I, thus opening the way for space exploration,

Recalling also that 10 October 1967 was the date of the entry into force of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies,<sup>6</sup>

Decide, in order to contribute to the achievement of the objectives of UNISPACE III, in particular that of increasing awareness among decision makers and civil society of the benefits of the peaceful uses of space science and technology for sustainable development, to invite the General Assembly to declare, according to its procedures, "World Space Week" between 4 and 10 October for the yearly celebration at the international level of the contribution that space science and technology can make to the betterment of the human condition.

## **Notes**

- 1. See Report of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space, Vienna, 9-21 August 1982 (A/CONF.101/10 and Corr.1 and 2).
- 2. General Assembly resolution 2222 (XXI), annex.
- 3. Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992 (United Nations publication, Sales No. E.93.I.8 and corrigenda), vol. I: Resolutions Adopted by the Conference, resolution 1, annex II.
- 4. The existing treaties and agreements are the Treaty on Principles Governing the Activities of States in the Exploration and Peaceful Use of Outer Space, including the Moon and Other Celestial Bodies (the "Outer Space Treaty"), which was adopted on 19 December 1966 and opened for signature on 27 January 1967 and which entered into force on 10 October 1967 (95 ratifications and 27 signatures); the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (the "Rescue Agreement"), which was adopted on 19 December 1967 and opened for signature on 22 April 1968 and which entered into force on 3 December 1968 (85 ratifications and 26 signatures); the Convention on International Liability for Damage Caused by Space Objects (the "Liability Convention"), which was adopted on 29 November 1971 and opened for signature on 29 March 1972 and which entered into force on 1 September 1972 (80 ratifications and 26 signatures); the Convention on Registration of Objects Launched into Outer Space (the "Registration Convention"), which was adopted on 12 November 1974 and opened for signature on 14 January 1975 and which entered into force on 15 September 1976 (40 ratifications and 4 signatures); and the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (the "Moon Agreement"), which was adopted on 5 December 1979 and opened for signature on 18 December 1979 and which entered into force on 11 July 1984 (9 ratifications and 5 signatures).
- $5.\ Official\ Records\ of\ the\ General\ Assembly,\ Fifty-second\ Session,\ Supplement\ No.\ 20,\ (A/52/20),\ annex.$
- 6. General Assembly resolution 2222 (XXI), annex.