



English



Distr.: Limited

23 July 1999

Original:

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

Vienna

19-30 July 1999

Committee II

Agenda item 8

Status and applications of space science and technology

### Technical Forum

#### Conclusions and proposals of the Seminar on Environment and Remote Sensing for Sustainable Development

1. The Seminar on Environment and Remote Sensing for Sustainable Development focused on the application of space remote sensing science and technology to issues of importance to developing countries, such as agriculture, infrastructure, environment and decision-making, from the perspective of Governments and private space technology providers, as well as from that of regional representatives of the user community.
2. During the Seminar eight panel members made presentations describing existing programmes and future missions planned with a view to providing data and information products and the potential value of those products to developing countries. Subsequently, participants discussed with members of the panel issues concerning remote sensing and sustainable development.
3. Both the presentations and the subsequent discussion revolved around issues that condition the ability of developing countries to make full use of remote sensing data and information products. Those issues were as follows:
  - (a) Limitations in the capacity available in developing countries in terms of hardware, software and human resources;
  - (b) Problems of data pricing, access and standards;
  - (c) New missions by "space-faring" nations that were likely to have an adverse effect on both of the above factors;
  - (d) New models for the exploitation of remote sensing that had emerged in Brazil and India.
4. The Seminar made the following recommendations for incorporation in the text of the draft report of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) (A/CONF.184/3 and Corr.1 and 2):

### Paragraph 139



- (a) Insert a new paragraph 139 *bis* to read:

"The questions of access, dissemination and archiving of Earth observation data are growing in importance. Because issues of data policy, and in particular pricing policy, present obstacles to the effective utilization of Earth observation data, a greater clarity in statements of data policy by the supplier organizations would be helpful to the development of the Earth observation sector. The advantages and disadvantages of different pricing models should be explored and assessed against the opportunities to use Earth observation data for specific applications, including disaster management and global observations. The experience of those organizations which have already established Earth observation data policies, such as the National Space Development Agency of Japan and the European Space Agency, should be harnessed by national and international Earth observation programmes";

**Paragraph 140**

- (b) Insert a new paragraph 140 *bis* to read:

"To provide a venue for the discussion and resolution of technical and policy matters among data and information users and providers, both public and private, a series of regional forums should be held. To ensure their transparency and credibility, those forums should be organized and hosted by a non-governmental organization such as the International Society for Photogrammetry and Remote Sensing";

**Paragraph 142**

- (c) Insert a new paragraph 142 *bis* to read:

"The work of the Food and Agriculture Organization of the United Nations in using geographic information systems to analyse Earth observation and other environmental data to assist policy and decision makers should be communicated more fully to developing countries through literature, pilot project descriptions, data sets on CD-ROMs and the World Wide Web";

**Paragraph 144**

- (d) Add the following sentence at the end of paragraph 144:

"There should be a wider and more effective communication of lessons learned on the use of Earth observation for sustainable development in developing countries, including India's Integrated Mission for Sustainable Development and the cooperation between Brazil and China to launch their own Earth observation satellite, the China-Brazil Earth Resources Satellite (CBERS)";

**Paragraph 218**

- (e) Add a new subparagraph (e) to read:

"(e) Assisting the centres in developing strategies that would help administrators and managers to understand better the benefits available from the use of remote sensing in sustaining and enhancing the quality of life in developing countries";

**Paragraph 283**

- (f) Add the following sentence at the end of paragraph 283:

"Such cooperation will benefit from public/private partnerships, in appropriate circumstances, with suitable arrangements being made for risk-sharing and for developing operational systems that build on successful



research and development activities”;

**Paragraph 321**

(g) Add a new section after paragraph 321 to read:

**“(c) Specific action programmes**

“Open access to space is essential to the widest possible utilization of all applications that bring benefits to humankind, including sustainable development. Full participation in the information society of the twenty-first century requires that all nations have open access to environmental information gathered by Earth observation platforms. The principle of non-discriminatory access to Earth observation data contained in the Principles Relating to Remote Sensing of the Earth from Outer Space (General Assembly resolution 41/65, annex), in particular principle XII, should continue to be safeguarded and should be enhanced by a clearer definition of its meaning. The United Nations and its Committee on the Peaceful Uses of Outer Space should work with experts in international space law and space policy to define more precisely the issues of practical implementation behind the term ‘non-discriminatory access’. That work should include an assessment of how developing countries can put the principle of non-discriminatory access into practice and thereby gain maximum benefits from space-based Earth observation”.