



Distr.: General 8 June 1999

Original: English

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

Vienna 19-30 July 1999

Abstract of the national paper of Austria

- 1. The Austrian national paper provides an overview of space science and research carried out by the different scientific groups at Austrian universities and research institutions. That work is considered fundamental for any serious investment of a State in space technology and its application.
- 2. The funding for the various space activities is provided predominantly by the Federal Ministry for Science and Transport and distributed to the individual institutions through the Austrian Academy of Sciences and the Austrian Science Fund. Other projects are carried out under research and development contracts from the European Space Agency (ESA), the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT) and the European Commission.
- 3. In 1987 Austria became a full member of ESA. The annual contribution of Austria to the Agency amounted to about 440 million schillings in 1999. Austria has also been a member of EUMETSAT since 1995, with an annual contribution of S 99 million in 1999.
- 4. Participation in ESA and EUMETSAT programmes assists the smaller member States to bridge the technological gap to the larger countries and provides a basis for advanced technological research in universities and industry. More than 80 per cent of the Austrian financial contribution to international organizations like ESA will be returned in the form of research and development contracts, in particular to small and medium-sized companies and research groups in universities.
- 5. Any collaboration with international industrial consortia in the field of advanced technologies gives Austrian scientists and engineers the possibility to participate in those most challenging activities, which otherwise could not have been done. In participating to ESA programmes priority is given to the scientific exploration of the universe and the solar system, to satellite communications and navigation, to the observation of the Earth and atmosphere from space and to space transportation and technology development.
- 6. This means that, in addition to its involvement in the ESA mandatory programme (general activities, including general studies, the technology programme and the space science programme), Austria participates in the following optional programmes:
 - (a) Earth observation programmes:
 - (i) European remote sensing satellites ERS-1 and ERS-2;
 - (ii) Earth Observation Preparatory Programme (EOPP);
 - (iii) Polar orbit Earth observation missions (ENVISAT and METOP);

- (iv) Meteosat second generation (MSG);
- (v) Earth Observation Envelope Programme;
- (b) Programme for the Development of Scientific Experiments (PRODEX);
- (c) General Support Technology Programme (GSTP);
- (d) Telecommunications:
- (i) Advanced Systems and Technology Programmes (ASTP);
- (ii) Data Relay Technology Mission (DRTM);
- (iii) Advanced Research in Telecommunications Systems (ARTES);
- (iv) Navigation (GalileoSat);
- (e) Space transportation systems:
- (i) Ariane-5 development programme;
- (ii) Complementary Ariane-5 programmes, including Ariane-5 Plus;
- (iii) Future European Space Transportation Investigation Programme (FESTIP) and Future Launcher Technology Programme (FLTP).
- 7. A general evaluation of Austria's collaboration in ESA activities shows satisfactory results. The industrial return coefficient calculated by ESA for all countries, showing the geographical distribution of contracts awarded, amounted to 0.97 for Austria as at 31 December 1998. Some 85.7 per cent of the contracts were awarded to Austrian industrial companies and 14.3 per cent to scientific research institutions and universities.
- 8. The Institute of Space Research of the Austrian Academy of Sciences is the centre of activities for scientific space research in Austria. The Institute developed instruments that were flown on Russian space probes to planets and comets. Other instruments are being developed for different ESA scientific missions. Bilateral activities with France, the Russian Federation and the United States of America are being carried out in the fields of space science, life science and remote sensing.
- 9. Austrian research groups are analysing satellite remote sensing data for different applications such as cartography, land use, snow and ice cover, water run-off, landslides, meteorology and climatic changes both in Austria and worldwide using data from the optical and microwave sensors of various remote sensing satellites.
- 10. In the area of applying space technology for developing countries Austria plays a major role in the Committee for the Peaceful Uses of Outer Space, having chaired the Committee for nearly 40 years. It supports the Committee's work by assisting in the organization of the United Nations Conferences on the Exploration and Peaceful Uses of Outer Space and of symposia for developing countries.

2