

Distr.: General 17 June 1999

English

Original: Spanish

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

Vienna 19-30 July 1999

Abstract of the national paper of Chile

- 1. Chile's involvement in space activities began back in 1959, when it established a satellite tracking station administered by the University of Chile to assist the space operations of the National Aeronautics and Space Administration (NASA) of the United States of America. Since then the use of satellite systems and of satellite-derived data has spread extensively to all areas of national activities.
- 2. Other milestones have been the signing of an agreement between the General Directorate of Aeronautics and NASA in 1986 for the construction of an alternative landing facility for space shuttles, the conducting in February 1996 on board a NASA space shuttle of the first spaceborne Latin American medical experiment designed by Chilean research scientists, the placing in orbit of the first micro-satellite in July 1988 and the current vice-chairmanship of the Committee on the Peaceful Uses of Outer Space and of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).
- 3. The purpose of remote sensing in Chile has been to develop applications based on satellite technology in the areas of oceanography, forestry, industry, mining, land use management, environmental monitoring and disaster prevention.
- 4. In addition, owing to its special geographical and geodesic conditions, Chile has a high incidence of seismic movements of high magnitude and is particularly vulnerable to climatic phenomena such as floods, mudslides and the unpredictable effects of the El Niño phenomenon. Those factors highlight the importance for the country of the development and application of satellite technology in order to mitigate the effects of such phenomena.
- 5. Since 1996, Chile has also been developing programmes aimed at utilizing the special gravitational conditions that exist in Earth orbit for the crystallization of proteins that perform specific metabolic functions, with a view to their use as targets providing a basis for the development of new medical drugs. This technology is being used by the pharmaceutical industry to produce more specific, selective and potent pharmaceutical drugs.
- 6. A further application of major importance is the search and rescue of ships and aircraft in distress and also of human beings, through the International Satellite System for Search and Rescue (COSPAS/SARSAT) mission control centre, which is responsible for this service throughout the Southern Cone region.
- 7. Chile was one of the pioneers in Latin America in the implementation of communication systems based on satellite technology. Mobile telephony will soon lead to the large-scale use of personal communications service (PCS) technology, private sector participation in this market being extensive and varied. A number of universities are also involved in research in the area of telecommunications, both through their commercial links with television channels and other

companies and through investigation of the use of the spectrum itself. In Chile, the Telecommunications Office of the Ministry of Transport and Telecommunications is the supervisory and regulatory body responsible for use of the radiofrequency spectrum. There is also a wide network of radio amateurs whose collaboration is of particular value to the community when national disasters occur and who have also become involved in satellite technology for the purposes of their activities, so much so that they have even developed a project to launch a special communications satellite for radio amateurs, CESAR-1, which it is hoped to place in orbit in the course of 2001.

- 8. Thanks to the particularly good conditions in Chile for astronomic observation, a number of major international observatories, such as El Tololo, La Silla and, more recently, Paranal have been constructed. The Ministry of Foreign Affairs has consequently signed an agreement with the European Organization for Astronomical Research in the Southern Hemisphere (ESO) for the promotion of scientific research and human resource development in the field of astronomy. In that connection, Chile has ratified all the United Nations space treaties and strongly supports the concept of outer space as the common heritage of humanity to be used for exclusively peaceful purposes.
- 9. For all these reasons, Chile hopes that by achieving the objectives established for UNISPACE III and by pursuing the activities and addressing the topics proposed in the provisional agenda, this international meeting will yield positive results and make a genuine contribution to the development and integration of States.
- 10. It is obvious that in order to take practical advantage of the benefits of space technology applications, it is essential that States give precedence to the common interest, as expressed in the principle of "the exploration and peaceful uses of outer space". Countries today, especially developing countries, need to be capable of assimilating technological progress through an understanding of the present and its projection into the future, by formulating appropriate strategies to close the technology gap with the more advanced nations and thus avoid being overtaken by events.
- 11. Chile also wishes to underline that the Conference is of fundamental importance for the country and for all participants since it provides an opportunity to conclude bilateral and multilateral cooperation agreements and to agree upon financing formulas for implementing projects based on the use of space technology. This is the time to establish points of convergence and common interest and to learn how to use, for the benefit of humankind, the vast possibilities opened up by space. If we respond to this challenge and to the expectations of our peoples, we will be equal to the task of translating technological advances into welfare, progress and development. In this way, access to space will make it possible to foster peace and stability in the particular setting of each country and within the global context to which mankind belongs.

Milestones in Chilean space activity

- 1959 Establishment of the first cooperation agreement in space matters between the Government of Chile and NASA, giving rise to the Space Research Centre (CEE) at the University of Chile and the installation of the first satellite tracking station in the country.
- Designation of the National Telecommunications Enterprise (ENTEL) as a signatory company of the International Telecommunications Satellite Organization.
- 1968 Construction of the Longovilo Satellite Communications Earth Station, the first of its kind in Latin America.

1993	Hosting by Chile of the Second Space Conference of the Americas, for which Chile also provided the temporary secretariat during the subsequent three years.
1993	Organization by the Federation of Radio Amateur Clubs of Chile of a corporation, AMSAT-CE, for the development of radio amateur satellites.
1995	Commissioning of the mission control centre MCC-Santiago as part of the COSPAS/SARSAT system.
1996	Launching into orbit of the first protein crystallization experiment, "ChagaSpace", designed by Latin American scientists and originally developed in Chile.
1997	Publication of the DAN-08 05 Aeronautical Standard, which established the technical requirements for use of the Global Positioning System (GPS) as a primary navigation tool.
1997	Implementation in Chile of the World Area Forecast System.
1997	Convening of the First Latin American Seminar on Aerospace Medicine.
1997	Raimundo González Aninat, Director of Special Policy at the Ministry of Foreign Affairs, selected to serve as Vice-Chairman of the Committee on the Peaceful Uses of Outer Space, a function he performed until 1999, when he became Chairman of the Committee for a three-year term.
1998	Launch into orbit of the first Chilean satellite, FASat-Bravo.
1998	Hosting by Chile of the Regional Preparatory Conference for UNISPACE III for the Latin American and Caribbean Group, which concluded with the issue of the Concepción Declaration.
1998	Raimundo González Aninat took over the vice-chairmanship of UNISPACE III.