

Satellite technology as a source of integration. A comparative analysis: Europe / MERCOSUR.

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ABSTRACT¹

The main purpose of this presentation is to show a comparative analysis between the development of European Integration for space activities and the first steps towards the same target on the part of MERCOSUR, in South America.

INTRODUCTION

The development satellite technology has produced several changes in the field of international law, creating the need to build a new framework for integration and cooperation.

The main purpose of this presentation therefore, as outlined in the abstract, is to show a comparative analysis between the development of European integration in the field of for space activities and the first steps towards a similar target taken by MERCOSUR.

We shall not be dealing with the powers conferred upon the European community in

the field of research and development. We shall simply focus on the European Space Agency.

A review of the integration experience within MERCOSUR in the area of satellite technology, together with a comparative analysis, will help to highlight the positive and negative side effects of its development up to our present time.

EUROPE AND THE EUROPEAN SPACE AGENCY

In the early 1960s, France, Germany, Italy, the Netherlands, the United Kingdom and Australia concentrated on the development of space launcher capacities leading to the creation of the "European Launcher Development Organization" (ELDO). The European Space Research Organization" (ESRO), which was created the same year as ELDO, in 1964.¹

The European Space Agency was created after a diplomatic meeting that took place in Belgium in 1975. The ESA was set up after the European Space Research Organization (ESRO) and the European Launcher Development Organization (ELDO) with the some duties and rights.

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The European Space Agency is a regional international intergovernmental organization with international legal personalityⁱⁱ.

The members of this organization are: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, and the United Kingdom. On the basis of a special agreement, Canada cooperates with the said Organization.

The main target of this Organization is the encouragement of cooperation among its members and to provide and promote space research, space technology and its applications for peaceful purposesⁱⁱⁱ

ESA is a unique organization as it is the only international organization in the world dedicated to the research and development of space activities.^{iv}

Briefly, its structure is as follows. The Agency is directed by a Council composed of the representatives of member States, and the chief officer, who is the Director-General^v

The Organization has the following homebases:^{vi}

1. Its headquarters are in Paris
2. The European Space Research and Technology Centre, in Noordwijk, the Netherlands. It is the principal technical office of this Agency, in which the majority of the team projects, space science department, and technological research and support engineers are located;
3. The European Space Operations Centre (Darmstadt- Germany), is in charge of satellite operations and its corresponding ground facilities and communications networks;
4. The European Space Research Institute (Frascati, Italy), whose main

task is the exploitation of Earth observation data from space

5. The European Astronauts Centre (Porz – Wahn- Germany), which coordinates all European astronaut activities, including the training of the future European astronauts.

As stated earlier, we are not addressing the powers conferred upon the European community in the field of research and development

MERCOSUR

Since MERCOSUR was created in 1991, by the Treaty of Asunción. Its origin may be traced through bilateral agreements concluded between Argentina and Brazil

On 29th November, 1985 “Declaración de Iguazú” was signed, in which the Presidents of both countries declared their conviction that science and technology play an important role in the economic and social development.

The “Acta para la Integración Argentino-Brasileña” signed on 29th July 1986 established a Programme of Integration and Economic Cooperation between both countries

Two former Presidents of Argentina and Brazil (Menem and Sarney) signed the “Treaty of Integration, Cooperation and Development”^{vii} on 29th November 1988. The main purpose was to consolidate the integration and economic cooperation among both with the purpose of establishing a joint economic space within their territories.

On 23rd August 1989 the “Argentine – Brazilian Joint Declaration concerning

Bilateral Cooperation in Peaceful Uses of Outer Space^{viii} was signed. On this occasion the intention was stated of increasing cooperation in the field of peaceful uses of outer space and working together in specific areas, to be later determined.

This implementation of this agreement called for the creation of a “working group” under the responsibility of the Ministry of Foreign Affairs of both countries. This “working group” will be made up by the representatives of the entities involved in space activities.

On 26th March 1991 the Treaty of Asunción, which established the MERCOSUR, was signed by Argentina, Brazil, Uruguay and Paraguay.

On 9th April 1996 the Cooperation Framework Agreement on Peaceful Applications of Space Science and Technology^{ix} was concluded between Argentina and Brazil. The National Commission for Space Activities (Argentina) and the Brazilian Space Agency (Brazil) were appointed to carry out the purposes of this agreement^x

According to article 2, cooperation in this field included the following areas:

- Space sciences, space technology, evaluation and monitoring the environment, natural resources by remote sensing and other space applications.
- Development of space missions for scientific and technological purposes, and space applications.
- Mechanisms of access and launch services
- Other fields to be agreed on by the Parties.

Both countries stated that they are exempt from taxes and import and export duties for goods, equipment and materials sent from one country to another. The idea is to enforce the cooperation programmes they subsequently may agree on (Article 5).

In this context the Parties decided to maintain “working group” system. To this end a Joint Working Group for the Peaceful Uses of Outer Space has been established between Argentina and Brazil. The Brazilian side is composed of representatives of the Ministry of Foreign Affairs and the Brazilian Space Agency whilst the Argentine members are representatives of the Ministry of Foreign Relations and the National Commission for Space Activities. (Article.7).

The following treaties have been signed: so far

- A Cooperation Programme between National Commission of Space Activities (Argentina) and the Brazilian Space Agency regarding the SABIA3 Programme.
- A Cooperation Programme concerning sub-orbital launches.
- A Cooperation Programme relating to Ground Systems Infrastructure for Space Missions.

These Programmes were signed on 10th November 1998 in Buenos Aires.

The Argentine Space Programme 1997/2008 has stated that the National Commission for Space Activities should implement a long term Programme of remote sensing and global positioning. It should

cooperate, to this end, with the other countries of MERCOSUR. The development of cooperation with Brazil concerning Earth observation and the monitoring of food and water resources, together with environmental issues (SABIA3) is considered a first priority goal^{xi}.

On 8th May 2001 an Agreement Capacity Building was signed between Argentina and Brazil in Rio de Janeiro^{xii}

The main targets of this agreement, pursuant to its Article 2, are:

- To facilitate the provision of capacity building activities in Argentina and Brazil between the Argentine and the Brazilian commercial satellites, to be coordinated in accordance with the Rules of the International Telecommunication Union.
- To establish conditions and technical standards for the supply of space capacities in fix-services by satellites.

On 14th August 2001, It was signed the Additional Protocol to the Cooperation Framework Agreement on Pacific Applications on Space Science and Technology^{xiii} between Argentina and Brazil

This instrument states that the Parties have priority to provide systems, equipments or services if the other Party can obtain them from its own companies or agencies in order to carry out their duties.

CONCLUSION

As analyzed in the previous paragraphs, in Europe there is an Agency specialized on international cooperation within the countries of region. We have not considered the powers conferred upon the

European community in the field of research and development but, instead, have especially focused on the European Space Agency example which provides the most appropriate ways and means that may be followed within the MERCOSUR system.

Integration in the field of space technology is non-existent in South America. There are, as previously indicated, some bilateral agreements between Argentina and Brazil which intend to develop international cooperation between the main parties of MERCOSUR.

Argentina and Brazil chose the mechanism of "working groups". This option means a sharp departure from the ESA pattern.

The above-named countries are the unquestionable leaders of the integration process in South America. They should involve Paraguay and Uruguay -both of them parties to the MERCOSUR system- to continue work towards the development of space science and satellite technology following the example provided by Europe regarding mechanisms adopted for the European Space Agency.

It is important to underline that, in spite of the political, economic and social crisis that Argentina and Brazil are going through at the moment, they should continue working together in order to develop satellite technology and space sciences for the benefit of developing countries.

ⁱ See Gasparini Alves, Pericles: "Access to outer space technologies: Implications for international Security". UNIDIR. Research Paper 15. United Nations. New York. 1992. Page 47

ⁱⁱ See Art. XV. ESA Convention.

ⁱⁱⁱ See Art. II. ESA Convention.

^{iv} Lafferrandier, Gabriel and Tuinder, Paul Henry: "The Role of ESA in the Evolution of Space Law" in Journal of Space Law. Volume 22, Numbers 1&2. 1994 Page 97

^v United Nations. Office for Outer Space Affairs. "Space Activities of the United Nations and

International Organizations” United Nations. New York. 1999. Page 100

^{vi} United Nations. Office for Outer Space Affairs. “Space Activities of the United Nations and International Organizations” United Nations. New York. 1999. Page 100

^{vii} Tratado de Integración, Cooperación y Desarrollo.

^{viii} Declaración Conjunta Argentino – Brasileña sobre Cooperación Bilateral en los Usos Pacíficos del Espacio Ultraterrestre

^{ix} Acuerdo Marco de Cooperación en Aplicaciones Pacíficas de Ciencia y Tecnología Espaciales

^x Article 1.

^{xi} Argentine Space Programme 1997/2008. Presidential Decree 1330/99. ADLA LIX-E. Page. 5363

^{xii} Acuerdo Para la Provisión de Capacidad Espacial

^{xiii} Protocolo Adicional al Acuerdo Marco de Cooperación en Aplicaciones Pacíficas de Ciencia y Tecnología Espaciales