

# Spain: Towards a National Space Legislation and a Spanish Space Agency?

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## Abstract

Although Spain is a Party in most of the Corpus Iuris Spatialis (the 1967 Outer Space Treaty; the 1968 Rescue agreement; the 1972 Liability Convention; and the 1974 Registration Convention), Spain has not yet adopted a national space legislation with a few exceptions. Moreover, two important national institutions, related to the exploration and exploitation of the outer space, have been created: the National Institute of Aerospace Technology (INTA) that reports to the Ministry of Defence; and the Centre for Technological and Industrial Development (CDTI) that reports to the Ministry of Economy and Competitiveness. Furthermore, Spain is a State Member of European Union, the European Space Agency and other international organizations and has ratified many bilateral and multilateral international agreements related to the outer space activities and policy. The need for a unified Spanish Space Legislation and a Spanish Space Agency becomes more evident every day. This paper will analyze some recent law developments and the increasing public debate about the necessity of the creation of a Spanish Space Agency.

## I. Introduction

In May 2010, in answer to eight questions prepared by the Chair of the Working Group on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space,<sup>1</sup> Spain explained that it was not necessary to enact extensive outer space legislation for three reasons:

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1 The Working Group on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space was established by the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space in 2009. The Working Group agreed that the exchange of information relevant to the peaceful exploration and use of outer space provided an important basis for its work under the multi-year workplan and allowed it to continue examining the main developments taking place at the national level in

- “a) Spain has not launched any space objects. The preliminary analysis made by the Working Group on this topic at the forty-eighth session of the Legal Subcommittee showed that the space activities most commonly subject to regulation are launch activities;
- (b) There is no sizeable private sector for such legislation. As all domestic space activities to date have either been public or have had significant public sector participation, there has been no incentive to enact such legislation;
- (c) According to the Spanish Constitution, international treaties ratified by Spain become law (i.e. they become part of the domestic legal system) once they are published in the Official State Gazette.”<sup>2</sup>

Nevertheless, Spain described in its report some national law and institutional developments, the international treaties on outer space ratified by Spain and its participation in international organizations involved in space cooperation. Indeed, it is pointed out in the report that debate has begun in Spain on “the need to legislate and on the advisability of drafting national space legislation with a view to enabling Spain to discharge its international obligations more effectively and also because of the growing presence of private space operators in the country”;<sup>3</sup> it can be added, nowadays, a second increasing public debate about the necessity of the creation of a Spanish Space Agency.

## II. Spain and Space: A Brief Story

The *space adventure* began in the fifties and Spain formed part of it from the outset. In 1951, INTA<sup>4</sup> contacted with NACA<sup>5</sup> to exchange information on aeronautical matters, – thanks to a sustained and fruitful professional relationship, maintained along the late forties between Prof. Esteban Terradas i

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order to identify common principles, norms and procedures (A/AC.105/935, annex III, para. 16).

2 Information on national legislation relevant to the peaceful exploration and use of outer space, doc. A/AC.105/957/Add.1, 2011, p. 4 ([www.unoosa.org/pdf/report/s/ac105/AC105\\_957Add01E.pdf](http://www.unoosa.org/pdf/report/s/ac105/AC105_957Add01E.pdf)).

3 *Ibid.*, p. 4.

4 *Instituto Nacional de Técnica Aeronáutica*, created as an autonomous public organism, within the framework of the Air Ministry (Air Force) by Decree 7 May 1942 (BOE n. 141, 21.05.1942). INTA has developed an intense activity, first in the aeronautical field, and later on, in the ambit of space as the *Instituto Nacional de Técnica Aeroespacial* (Decree 2845/1963, 31 October, BOE n. 268, 08.11.1963).

5 NACA, the National Advisory Committee for Aeronautics, was created by U.S. Congress in 1915 as an independent government agency for aeronautics research reporting directly to the President; it officially turned over operations to NASA (the National Aeronautics and Space Administration), the new agency responsible for civilian, human, satellite and robotic space programs and aeronautics research, on 1 October 1958 (See E. Suckow, Overview, 2009, at <http://history.nasa.gov/naca/overview.html>).

Illa<sup>6</sup> and Prof. Theodore von Kármán<sup>7</sup>. Since then, the relationship, first, with NACA, then, with NASA continued without a break in several areas, i.e.:<sup>8</sup> the Seminar on Space Science and Technology (1960); the MOU between the Spanish and the US Governments in 1960 to establish the first NASA satellite tracking station in Spain, in Maspalomas (Las Palmas, Canary Islands); the MOU between the Spanish and the US Governments in 1964 to establish the Robledo de Chavela Station (Madrid) as an integral part of NASA's Deep Space Network; the Arenosillo Launch Range, from 1966;<sup>9</sup> the Exchange of Notes signed between the Spanish and US Governments in 1965 to enlarge the Robledo station and to build the Cebreros station (Ávila) and Fresnedillas station (Madrid); the free launch of the first Spanish satellite INTASAT in 1974; the MOU between the Spanish and the US Governments in 1983 and 1984 to designate the Spanish Air Force bases at Saragossa and at Morón (Seville) as a emergency landing runway for the Space Shuttle. At the same time, Spain began to cooperate with other European countries in space-related matters; however, in this case, the way was not so easy at the beginning, because, on the one hand, the country, after more than 20 years of political isolation,<sup>10</sup> was virtually unrepresented in Western European *fora*,<sup>11</sup> and, on the other hand, the country suffered from a serious technical, technological and scientific backwardness and a severe economic recession. Never-

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- 6 A Spanish mathematician, physicist and engineer who promoted the creation of INTA and was the first President of the "Advisory Board" (Order by the Air Ministry, 13 July 1942, BO del Ministerio del Aire, n. 85, 16.07.1942); after Terradas's death in 9 May 1950, the Institute received his name (July 1950). See Millán Barbany, G., "Los Orígenes del INTA", *Ingeniería Aeronáutica y Astronáutica*, n. 331, 1992, pp. 53-60 ([http://oa.upm.es/2106/2/MILLAN\\_ART\\_1992\\_01a.pdf](http://oa.upm.es/2106/2/MILLAN_ART_1992_01a.pdf)).
  - 7 A Hungarian-American mathematician, aerospace. engineer and physicist, who as Director of the Guggenheim Aeronautical Laboratory of the California Institute of Technology (GALCIT) founded, with other colleagues, the Jet Propulsion Laboratory (JPL), which is now a federally funded research and development centre managed and operated by CALTECH under a contract from NASA. He was a good friend of Spain and a regular visitor to the country from 1947 (See Millán Barbany, G., "Von Karman y la investigación aeronáutica española", *Ingeniería Aeronáutica y Astronáutica*, n. 60, 1961, pp. 15-17, [http://oa.upm.es/2081/1/MILLAN\\_ART\\_1961\\_01.pdf](http://oa.upm.es/2081/1/MILLAN_ART_1961_01.pdf)).
  - 8 Dorado, J.M., Bautista, M., Sanz-Aránguez, P. Spain in Space. A short history of Spanish activity in the space sector, History Study Reports (HSR), n. 26, August 2002, ESA Publications Division, pp. 3-7 ([www.esa.int/esapub/hsr/HSR\\_26.pdf](http://www.esa.int/esapub/hsr/HSR_26.pdf)).
  - 9 See Vázquez Velasco, M., "De El Arenosillo al CEDEA", INTA, Catálogo de Publicaciones Oficiales, 2010 ([www.inta.es/noticias/documentos/ARENOSILLO-CEDEA.pdf](http://www.inta.es/noticias/documentos/ARENOSILLO-CEDEA.pdf)).
  - 10 Until 1950, when the US supported a United Nations (UN) resolution lifting the boycott on Franco's regime and in 1951 resumed full diplomatic relations with Spain. Moreover, Spain became a member of UN on 14 December 1955 ([www.spainun.org/en/spain-at-the-un/history/](http://www.spainun.org/en/spain-at-the-un/history/)).
  - 11 Dorado, J.M., Bautista, M., Sanz-Aránguez, P., *op. cit.* p. 9.

theless, in 1960, admission to any European Organization was a highly attractive political proposition and COPERS<sup>12</sup> was an unique opportunity. That is why Spain became a member of COPERS, whose main objective was to prepare the way to a more established European Space Organization, signing the so-called Meryin Agreement, after a very intense diplomatic pressure.<sup>13</sup> Notwithstanding this political success, it was not possible to avoid another domestic debate between those who argued that the high cost of space development and the purely scientific nature of the investigations appear to exclude nations with a weak economy and limited scientific and technical resources, as the economic sacrifice involved does not appear to be offset by the results that may be expected; and those who justified Spanish membership on practical grounds, i.e., the President of CONIE:<sup>14</sup> “in the scientific revolution that is taking place in the present world, where progress is so rapid that no-one can afford to remain on the side-lines as a passive spectator, a choice must be made, either to share in this progress or be condemned irrevocably to underdevelopment”.<sup>15</sup>

Later on, the Western European nations decided to have two different agencies: ESRO,<sup>16</sup> – that emerged from COPERS-, and ELDO,<sup>17</sup> whose aim was to

12 Commission Préparatoire Européenne de Recherche Spatiale / European Preparation Commission for Space Research. COPERS was created by the International Conference of Space Research hold at Meyrin – near Geneva – (Switzerland) from 28 November to 1 December 1960. The Meryin Agreement was signed by 11 countries – Austria, the twelfth State, did it some months later –, and came into force on 27 February 1961. COPERS gave back its duties in 1964. See the Historical Archives of the European Union, European University Institute (<http://archives.eui.eu/en/fonds/95303?item=COPERS>).

13 José Manuel Aniel-Quiroga, the Minister Plenipotentiary at Spain's Permanent Delegation to the International Organisations in Geneva, found out that Spain could be invited as an observer to the Meyrin meeting, if the Spanish Embassy in Bern asked it by a simple *note verbale*. The Political Department of the Swiss Government's General Directorate of International Organizations granted the status of observer sending the invitation to the Spanish Ambassador. Some countries raised objections of a legal nature “primarily because it could set a precedent, which could be used by other countries whose presence is not desired”; however, as a result of the Delegation's good work, Spain was finally accepted as a member and signed the agreement (See for more details, Dorado, J.M., Bautista, M., Sanz-Aránguez, P., *op. cit.* p. 9).

14 The *Comisión Nacional de Investigación del Espacio* (National Commission for Space Research), created by Spanish Government, within the framework of Air Ministry (Air Force), by Act 47/1963, 08.07.193 (BOE n. 164, 10.07.1963). Under that Act, INTA became the Technological Centre of CONIE.

15 Dorado, J.M., Bautista, M., Sanz-Aránguez, P., *op. cit.* p. 9.

16 European Space Research Organization, created by the Convention signed on 14 June 1962 and came into force on 20 March 1964. See the Historical Archives of the European Union, European University Institute (<http://archives.eui.eu/en/fonds/139034?item=ESRO>); Krige, J., Russo, A., (with contributions of De María, M. & Sebesta, L.), *A history of the European Space Agency*,

develop a launch system and whose structure was defined in parallel negotiations between a smaller group of governments and which included a non-European country, Australia, among its Member States.<sup>18</sup> Spain, facing the same dilemma referred *supra*, joined ESRO in 1962,<sup>19</sup> because political considerations prevailed, but did not join ELDO, as, in this case, economic considerations prevailed since the first moment.<sup>20</sup>

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1958-1987, (Vol. I – *The story of ESRO and ELDO, 1958-1973*), ESA Publications Division, 2000 ([www.esa.int/espapub/sp/sp1235/sp1235v1web.pdf](http://www.esa.int/espapub/sp/sp1235/sp1235v1web.pdf)).

- 17 European Launch Development Organization, created by the Convention signed on 29 March 1962 and entered into force on 29 February 1964. See the Historical Archives of the European Union, European University Institute (<http://archives.eui.eu/en/fonds/105683?item=ELDO.C-01.05>); Krige, J., Russo, A., (with contributions of De María, M. & Sebesta, L.), *op. cit.*
- 18 [www.esa.int/About\\_Us/Welcome\\_to\\_ESA/ESA\\_history/History\\_Meyrin\\_conference\\_1960](http://www.esa.int/About_Us/Welcome_to_ESA/ESA_history/History_Meyrin_conference_1960).
- 19 Spain signed the Convention on 14 June 1962 and ratified it on 19 December 1963 (BOE n. 178, 27.07.1965). Spain was to contribute 2.54% to the ELDO budget, – due to the exception made for countries with per capita income below US\$ 300 (Spain and Austria) –; however, it increased to 2.66% when Austria and Norway failed to sign the Convention. In 1967, a huge accumulated debt to ESRO, the poor industrial return, and the payment crisis (because of the devaluation of the Spanish *peseta* and the reduction of the public spending) made the Spanish government to consider seriously to withdraw from ESRO; finally, an agreement was reached and by 1973, the return coefficient was 97%; See Dorado, J.M., Bautista, M., Sanz-Aránguez, P., *op. cit.* p. 11; Madders, K., *A New Force at a New Frontier (Europe's Development in the Space Field in the Light of its Main Actors, Policies and Activities from its Beginnings up to the Present)*, Cambridge University Press. 2006.
- 20 “Powerful drivers existed for Spain joining the new European space organization but reasons also existed for not joining it [...] These mentioned drivers were in the first place of political nature; we should remember that the initiative to attend the Meyrin Conference came from Foreign Affairs Ministry. Spain was very much interested in approaching the European countries as a means to strengthen its possibilities of becoming a member of the European Economic Community. In the second place, there was a very positive experience from the relation with NASA in both political and economical aspects (NASA was starting to spend an important amount of money in Spain every year and employing an increasing number of INTA people. In the third place, there were other mixed interests (technology for military applications, NASA recommendations to INTA to participate in the European space effort, a much needed place for INTA in a new scenario, public image of the regime, etc.). In the opposite side, there were reasons such as the reluctance of the Finance Ministry to invest in an activity of uncertain interest, the pressure to devote money to other scientific areas, and the low capacity and interest of Spanish industry and science so as to justify the economical soundness of this investment”, Dorado Gutiérrez, J.M. “The first Spanish space programme (1968-1974)”, *Acta Astronautica*, 61(2007), p. 538.

In 1975, ESA<sup>21</sup> was created by agreement signed on 30 May by 10 European States, – including Spain –<sup>22</sup> and came into force on 30 October 1980. Up to now, Spain has maintained its membership within mutually satisfactory limits,<sup>23</sup> benefiting the Spanish industry and science, through its participation in mandatory activities and optional programmes, concerning transport vehicles, communications platforms, observation platforms and earth observation.<sup>24</sup> Spain became a member of COPUOS in 1980 with the UNGA Resolution 35/16, when the General Assembly decided to increase the membership in COPUOS from 47 to 53,<sup>25</sup> although Spain rotated seats every three years with Portugal until 1994, when the General Assembly decided to expand the membership from 53 to 61.<sup>26</sup> Finally, Spain became party of ITSO (1973),<sup>27</sup> IMSO (1979),<sup>28</sup> EUTELSAT (1985),<sup>29</sup> EUMESAT (1986)<sup>30</sup> and ITU (1996)<sup>31</sup> and as a State member of the European Union, since 1986, it has to comply with the TEU and TFEU.<sup>32</sup>

21 European Space Agency. See Krige, J., Russo, A., Sebesta, L., *A history of the European Space Agency, 1958-1987, (Vol. II – The story of ESA, 1973-1987)*, ESA Publications Division, 2000 ([www.esa.int/esapub/sp/sp1235/sp1235v2web.pdf](http://www.esa.int/esapub/sp/sp1235/sp1235v2web.pdf)).

22 Spain ratified the ESA Convention on 15 January 1979 (BOE, n. 11, 13.01.1981).

23 Dorado, J.M., Bautista, M., Sanz-Aránguez, P., *op. cit.* p. 11. Spain has traditionally stood among the five or six highest contributors to the ESA, with a contribution between 5% or 7% of the total funding allocated to optional programmes; at the last Ministerial Council of the ESA, December 2014, the Spanish Delegation (SG Industry and SMEs/CDTI) announced an investment of 344.5M € ([www.lamoncloa.gob.es/lang/en/gobierno/news/Paginas/2014/20141202-eu-space-agency.aspx](http://www.lamoncloa.gob.es/lang/en/gobierno/news/Paginas/2014/20141202-eu-space-agency.aspx)).

24 See [www.esa.int/esl/ESA\\_in\\_your\\_country/Spain](http://www.esa.int/esl/ESA_in_your_country/Spain). For more detailed information about the collaboration between ESA and Spain, See, *inter alia*, Claros Guerra, V., León Serrano, R., “Historia de la Estación de Seguimiento de Satélites de Villafranca del Castillo “VILSPA” (1975-2009), INTA-INSA, 2011.

25 UNGA Res. 35/16, 03.10.1980, Enlargement of the Committee on the Peaceful Uses of Outer Space. The General Assembly decided to increase, first, from 47 to 48, at the request of China for admission as formal member (it began to take part of COPUOS as an observer in 1980), and, then, from 48 to 53, due to the fact that other States had also expressed interest: Greece (to fill the vacancy caused by the withdrawal of Turkey – member since 1977 – given that both States rotated seats every three years until 1994-), Spain (for the regional group “Western Europe and other”, Syrian Arab Republic, Burkina Faso (Upper Volta, at that time), Uruguay and Viet Nam.

26 UNGA Res. 49/33, 09.12.1994. See the membership evolution of COPUOS at [www.unoosa.org/oosa/en/ourwork/copuos/members/evolution.html](http://www.unoosa.org/oosa/en/ourwork/copuos/members/evolution.html).

27 International Telecommunications Satellite Organization. Spain signed the Agreement on 20 August 1971 and ratified it on 16 November 1972 – instrument deposited on 30.11.1972 – (BOE n. 66, 17.03.1973). See [www.itso.int/](http://www.itso.int/).

28 International Mobile Satellite Organization (at that time, International Maritime Satellite Organization – INMARSAT-). Spain signed the 1976 Agreement on 30 January 1978 and ratified it on 16 August 1978 – instrument deposited on 05.09.1978 – (BOE n. 189, 08.08.1979). See [www.imso.org/public](http://www.imso.org/public).

29 Spain signed the 1982 Agreement on 24 November 1983 and ratified it on 9 January 1985 – instrument deposited on 31.01.1985 – (BOE n. 235, 01.10.1985).

It is necessary to complete this brief history of Spain and the space sector with a reference to the *Corpus Iuris Spatialis*. Spain is a Party to four of the five Treaties:<sup>33</sup> the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space (1969);<sup>34</sup> the 1968 Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (2001);<sup>35</sup> the 1972 Convention On International Liability for Damage Caused by Space Objects (1980);<sup>36</sup> and the 1974 Convention on Registration of Objects Launched into Outer Space (1979).<sup>37</sup> With respect to the General Assembly Resolutions relating to outer space activities, most of them have been adopted by consensus,<sup>38</sup> however, when there was a vote concerning the 1982 Principles Governing the Use by

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- 30 Spain signed the Agreement on 24 May 1983 and ratified it on 22 January 1985 – instrument deposited on 4 February 1985 – (BOE n. 225, 19.09.1986).
- 31 Spain signed the Agreement on 22 December 1992 and ratified it on 28 March 1996 – instrument deposited on 15 April 1996 – (BOE n. 130, 29.05.1996). See [www.itu.int/](http://www.itu.int/).
- 32 Treaty on the European Unión and Treaty on the Functioning of the European Union (consolidated version), OJ 326, 26.10.2012. See Muñoz Rodríguez, M.C., “El Tratado de Lisboa: la acentuación de los límites estatales a la política espacial europea”, in *El Tratado de Lisboa: la salida de la crisis constitucional* (coord. J. Martín y Pérez de Nanclares), Asociación de Profesores de Derecho Internacional y Relaciones Internacionales (AEPDIRI) – IUSTEL, 2008, pp. 309-317.
- 33 Spain did not sign the 1979 Agreement Governing the Activities of the States on the Moon and Other Celestial Bodies and, until now, has not acceded to it. This Agreement came into force on 11 July 1984 and, so far, has 16 Parties.
- 34 Spain acceded to the 1967 Treaty by instrument deposited on 27 November 1968 (BOE n. 30, 04.02.1969).
- 35 Spain acceded to the 1968 Agreement on 23 January 2001 by instrument deposited on 26 February 2001 in London, Moscow and Washington (BOE n. 137, 08.06.2001).
- 36 Spain signed the Convention on 29 March 1972 and ratified it on 6 December 1979 by instrument deposited on 2 January 1980 (BOE n. 106, 02.05.1980).
- 37 Spain acceded to the 1975 Convention on 4 December 1978 by instrument deposited on 20 December 1978 (BOE n. 25, 29.01.1979).
- 38 UNGA Resolution 41/65, 03.12.1986, Principles relating to remote sensing of the Earth from outer space; UNGA Resolution 47/68, 14.12.1992, Principles Relevant to the Use of Nuclear Power Sources in Outer Space; UNGA Resolution 51/122, 13.12.1996, 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; UNGA Resolution 59/115, 10.12.2004, Application of the concept of the “launching State”; UNGA Resolution 62/101, 17.12.2007, Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects; UNGA Resolution 62/217, 22.12.2007, International cooperation in the peaceful uses of outer space (Space Debris Mitigation Guidelines developed by the COPUOS); UNGA Resolution 68/74, 11.12.2013, Recommendations on national legislation relevant to the peaceful exploration and use of outer space.

States of Artificial Earth Satellites for International Direct Television Broadcasting, Spain has voted against.<sup>39</sup>

At last, but not least, concerning the space industry, there has been an spectacular progress over the last 20 years (around twenty companies employ about 3,500 people – high-qualified jobs, 2014 – and invoice 740 M €),<sup>40</sup> in which the Spanish space industry has moved from playing a secondary role in the value chain to one of leadership in complete systems. Besides the capacity to lead complete space systems, there is a raft of independent medium-sized companies that have developed important technologies and components that are now used successfully in both the commercial and institutional markets.<sup>41</sup>

### III. A National Space Legislation?

The issue of national space legislation has, during the past two decades, become a relevant topic. It has been stated that the reason was the governmental character of space activities for the first thirty to forty years of spacefaring, and, even though commercial activities were established quite early, the privatization of space activities dates only from the past two decades.<sup>42</sup> Spain, despite this long and intense space history, is one of a number of relevant spacefaring nations like Italy, Germany, Canada, China or India, which have not yet enacted a comprehensive national space law, but have started to regulate certain aspects of the conducts of space activities.<sup>43</sup> According to Spain's answer to Working Group on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space, the 1975 Registration Convention is the only space treaty – in which Spain is a Party – that clearly requires domestic implementing legislation;<sup>44</sup> that is why the national register of space

39 UNGA Resolution 37/92, 10.12.1982. 107 States voted for, 13 voted against (including Spain) and 13 abstained.

40 <http://marcaespana.es/en/news/society/sector-growth>.

41 [www.lamoncloa.gob.es/lang/en/gobierno/news/Paginas/2014/20141202-eu-space-agency.aspx](http://www.lamoncloa.gob.es/lang/en/gobierno/news/Paginas/2014/20141202-eu-space-agency.aspx).

42 Sánchez-Aranzamendi, M., *Economic and Policy Aspects of Space Regulations in Europe. Part 1: The Case of National Space Legislation – Finding the Way Between Common and Coordinated Action*, ESPI Report 21, 2009, p. 8.

43 Marboe, I., “National Space Law”, in von der Dunk, Tronchetti, F. *Handbook of Space Law*, Edwar Elgar Publishing, 2015, pp. 171-176. Dempsey, P.S., “National Laws Governing Commercial Space Activities: Legislation, Regulation and Enforcement”, *Northwestern Journal of International Law & Business*, 1(2016, pp. 1-44).

44 The document says that Spain itself has not launched any space objects, but it has procured the launch of a series of space objects. In fact, before the Registration Convention, the first Spanish technological Satellite – INTASAT – was successfully launched on 15 November 1974, through the collaboration INTA-NASA (NASA contributed with the free launch as a secondary payload on board the Delta vehicle used to launch the ITOS-G weather satellite); however, after the accession to the Registration Convention and before the establishment of the National Register, Spain

objects was established by the Royal Decree 278/1995,<sup>45</sup> that is maintained by the General Directorate for International Economic Affairs of the Ministry of Foreign Affairs and Cooperation and it covers satellites launched from Spanish territory and satellites whose launch has been procured by Spain. It does not include control measures or sanctions.

As stated above, although there are legal and institutional developments,<sup>46</sup> debate has begun in Spain on “the need to legislate and on the advisability of drafting national space legislation with a view to enabling Spain to discharge its international obligations more effectively and also because of the growing presence of private space operators in the country”.<sup>47</sup> Since 2014, “the most significant development is the existence of a draft bill regulating private space activities”.<sup>48</sup> Although the draft is not yet publicly available,<sup>49</sup> it is possible to know some details in press news. The Spanish Ministry of Public Works is responsible for the initiative, but also other Ministries are concerned (Defence, Treasury & Public Administration Services, Industry, Energy &

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procured the launch of two telecommunications satellites: Hispasat 1-A (10.09.1992) and 1-B (22.07.1993) and one scientific and communication satellite UPMSAT 1 (07.07.1995); See [www.unoosa.org/oosa/osoindex/](http://www.unoosa.org/oosa/osoindex/).

45 Royal Decree 278/1995, 24th February (BOE n. 58, 09.03.1995). Minisat 01 was the first Spanish satellite to be launched on 21 April 1997 and registered on 8 July 1997: See the *Note verbale* dated 9 October 1997 from the Permanent Mission of Spain to the UN (Vienna) addressed to the Secretary-General ([www.unoosa.org/documents/pdf/ser326E.pdf](http://www.unoosa.org/documents/pdf/ser326E.pdf)) and Gutiérrez Espada, C., “Los grandes retos del Derecho del Espacio Ultraterrestre (aprovechando el lanzamiento del *Minisat 01*)”, *Anuario de Derecho Internacional de la Universidad de Navarra*, XIII (1997), pp. 177-212. See for more details, Faramiñán Gilbert, J.M. de, “Análisis jurídico sobre el concepto de objeto aeroespacial (desde la legislación y la doctrina española)”, *Revista Española de Derecho Internacional*, vol. XLIX, n. 1, 1997, pp. 333-341.

46 National Law related to space activities (Act 9/2014, of 9 May, Telecommunications, Act 37/1995, of 12 December, Satellite Communications, modified by Act 7/2010, of 31 March [...]); it should be added the Autonomous Community Law, i.e. Catalanian Act 14/2009, of 22 July, Airports, Heliports and other *airport* infrastructures.); national institutional developments (INTA, CDTI [...]); the international treaties on outer space ratified/acceded by Spain (besides mentioned treaties, ISS Agreements, NASA Agreements, TEU and TFEU 2007; and participation in international organizations involved in space cooperation.

47 Spain recognizes that “the discussions were initiated in the light of article VI 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, following the launch, on 29 July 2009, of the first Spanish artificial satellite financed entirely with private capital, the Deimos-1 Earth observation satellite” (Information on national legislation relevant to the peaceful exploration and use of outer space, doc. cit., p. 4).

48 See Moro-Aguilar, R., “National Regulation of Private Suborbital Flights: A Fresh View”, 10 *FIU Law Review* (2015), p. 706.

49 As no official project has been presented to *Las Cortes* (the Spanish Congress and Senate) and given that the political results of the national elections held on 20 December 2015, the project's success cannot be ensured with the next government.

Tourism, Economic Affairs & Competitiveness and Agriculture, Food & Environmental Affairs). The draft Preamble declares that the aim of this law is to regulate and to promote the private space activities,<sup>50</sup> including the private manned suborbital flights.<sup>51</sup>

From another point of view, Spain has to take into account the international and the European frameworks. Therefore, it would be useful to follow the recommendations of the General Assembly<sup>52</sup> on national legislation relevant to the peaceful exploration and use of outer space, based, otherwise, in the UN space treaties. It is also necessary to consider all the possibilities arising from the application of 2007 TEU and TFEU. As it is stated, “there is need (whether it happens at a supranational level or at intergovernmental level), for a referential legal framework that brings together space laws in Europe in a way that supports a three-fold aim: it must be able to support the contribution of commercial space activities to the “Growth and Jobs” strategy, it must be able to provide a strong position of European Space Operators in the global context by facilitating competitiveness of the European space sector and it must be able to provide a level playing field with regards to international operators”;<sup>53</sup> nevertheless, the way to create such a legal framework is not easy given the gaps and differences among EU Member<sup>54</sup> States and the limitations of the space competence in the light of article 189 TFEU.

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50 General Miguel Ángel Martín Pérez has explained that the draft bill is also interesting to other States, like the US, because the foreign governments and industries would like to invest in the infrastructure that already exists in Spain to project a future spaceport (Infoespacial.com, 25.03.2014).

51 Moro-Aguilar, *op. cit.*, p. 706. He explains that the draft includes a domestic regulation of private manned suborbital flights, which basically follows the model put in place by the U.S. CSLAA, and that Officials of the Spanish Ministry have been in contact with the U.S. FAA in order to gain advice and collaborate with their U.S. counterparts.

52 UNGA Resolution 68/74, 11.12.2013, Recommendations on national legislation relevant to the peaceful exploration and use of outer space. The text focuses on the launch of objects and their return; the authorization and supervision over space activities carries out in State's territory or elsewhere by its citizens/legal persons under its jurisdiction/control; the national space authority for licensing/authorisation; the conditions for authorisation consistent with the international obligations; the goal of activities carried out in a safe manner for persons, environment or property; the continuing supervision and monitoring of authorized space activities, also in the event of the transfer of ownership (control or a space object in orbit; the national registry of space objects; the seeking of recourses if damages occur, including from operators and owners of space objects.

53 Sánchez-Aranzamendi, M., *Economic and Policy Aspects of Space Regulations in Europe. Part 1: The Case of National Space Legislation – Finding the Way Between Common and Coordinated Action*, *op. cit.*, p. 42.

54 See, *inter alia*, Hobe, S. Schmidt-Tedd, B., Schrogl, K.-U. (eds.), *Proceedings of the Workshop: Towards a Harmonized Approach for National Space Legislation in Europe*, Project 2001 Plus – Global and European Challenges for Air and Space Law at

#### IV. A National Space Agency?

In Spain, no national space agency exists as such. Public space activities and space applications are conducted through different governmental entities, which report to different Ministries, *inter alia*: DGAM<sup>55</sup> and INTA<sup>56</sup> (Ministry of Defence), CDTI<sup>57</sup> (Ministry of Economic Affairs & Competitiveness), Secretary General for Industry & SME (Ministry of Industry, Energy & Tourism), AENA<sup>58</sup> (Ministry of Public Works) and AEMET<sup>59</sup> (Ministry of Agriculture, Food & Environmental Affairs). Nonetheless, as it is well known, the main entities are: INTA and CDTI.<sup>60</sup>

INTA is, nowadays, a Public Research Organization<sup>61</sup> specialized in aerospace research and technology development attached to the Minister of Defence. Its main functions are: acquisition, maintenance and continuous improvement of all those technologies that can be applied to the aerospace field; performing all types of tests to check, approve and certify materials, components equipment items, subsystems and systems that have an aerospace application; provide technical assessment and services to official bodies and agencies, and also to industrial or technological companies; and act as a technological centre for the Ministry of Defence.<sup>62</sup>

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the Edge of the 21st Century, Institute of Air and Space Law & German and Aerospace Center, 2004; von der Dunk, F., *Private Enterprise and Public Interest in the European "Spacescape": Towards a Harmonized National Space Legislation for Private Space Activities in Europe*, Leiden, 1998 and *National Space Legislation in Europe: Issues of Authorization in Private Space Activities in the Light of Developments in European Space Cooperation*, Martinus Nijhoff, 2011.

55 *Dirección General de Armamento* (Directorate General of Armament and Material). In December 2015, it presented its "Plan Director de Sistemas Espaciales" (Master Plan for Space Systems) to aid decision-making in the framework of planning, programming and obtaining material resources within different bodies involved in this area ([www.defensa.gob.es/Galerias/dgamdocs/plan-director-sistemas-espaciales.pdf](http://www.defensa.gob.es/Galerias/dgamdocs/plan-director-sistemas-espaciales.pdf)).

56 *Instituto Nacional de Técnica Aeronáutica* (National Institute for Aerospace Technology).

57 *Centro para el Desarrollo Tecnológico e Industrial* (Centre for the Development of Industrial Technology).

58 *Aeropuertos Españoles y Navegación Aérea* (Spanish Airports and Air Navigation).

59 *Agencia Estatal de Meteorología* (State Meteorological Agency).

60 See Faramiñán Gilbert, J.M., "Spanish Law and the International Space Station", in von der Dunk, F (ed.), *The International Space Station: Commercial Utilization from a European Legal Perspective*, Brill, 2006, p. 206.

61 *Organismo Público de Investigación (OPI)*. The last modification of its Statutes is made by Royal Decree 925/2015, of 16 October (BOE n. 249, 17.10.2015), due to an administrative reform aimed at fostering efficiency and competitiveness for a sustained economic recovery (CORA Plan).

62 [www.inta.es/quienessomos.aspx](http://www.inta.es/quienessomos.aspx).

CDTI is a Public Business Entity,<sup>63</sup> answering to the Ministry of Economy and Competitiveness. Its main functions are: financial and economic-technical assessment of R&D projects implemented by companies; managing and fostering Spanish participation in international technological cooperation programmes, i.e. in ESA and EUMETSAT; fostering international business technology transfer and support services for technological innovation; and supporting the setting up and consolidating technological companies.<sup>64</sup>

In 2015, Mrs. Cristeto-Blasco, the Secretary General for Industry & SME (Ministry of Industry, Energy & Tourism) has announced that the Government is working on a future Spanish Space Agency.<sup>65</sup> Actually, the so-called “Inter-ministerial Commission of Space”, has been created on 15 January 2015, among Ministry of Defence (DGAM and INTA), Ministry of Treasury & Public Administration Services, Ministry of Public Works (Secretary General for Transportation), Ministry of Industry, Energy & Tourism (Secretary General for Industry & SME), Ministry of Economic Affairs & Competitiveness (Secretary General of Science, Technology & Innovation and CDTI) and Ministry of Agriculture, Food & Environmental Affairs (AEMET), to coordinate and to follow-up the industrial and technological aspects of the national space policy, is an unique opportunity to deal with the future of space activities in Spain.<sup>66</sup> The Secretary has explained that, from a technological and industrial perspective, and in order to keep the 5<sup>th</sup> investment position in the European space sector, it is necessary to maintain an effective coordination among governmental bodies, companies and technological centers, avoiding duplications and optimizing the investments results.

The work of this Inter-ministerial Commission is going on, but it has not published any conclusion, even provisional. Some information related arise from public declarations by members of the Government; for example, concerning the name and the legal nature, it could be an agency, a national commission or a directorate general; regarding its main missions, it has been said that it will prepare the national space plan and strategy to be achieved by 2020.<sup>67</sup> No more details about structure, resources, budget are known.

63 Royal Decree 1406/1986, of 6 June (BOE n° 162, 08.07.1986, last modification: Royal Decree 345/ 2012, of 10 February (BOE n. 36, 11.02.2012) and Act 14/2011, of 1 June, Science, Technology & Innovation (BOE n. 131, 02.2011).

64 <https://www.cdti.es/index.asp?MP=14&MS=59&MN=1>.

65 [Infoespacial.com](http://infoespacial.com), 15.06.2015 ([www.infoespacial.com/es/2015/06/15/noticia-espana-tendra-su-propia-agencia-espacial.html](http://www.infoespacial.com/es/2015/06/15/noticia-espana-tendra-su-propia-agencia-espacial.html)).

66 “Plan Director de Sistemas Espaciales” (Master Plan for Space Systems), doc. cit., p. 27.

67 Interview with Mrs. Cristeto-Blasco (TEDAE, 28.10.2015) [www.tedae.org/es/noticias/entrevista-begona-cristeto-secretaria-general-de-industria-y-de-la-pequena-y-mediana-empresa](http://www.tedae.org/es/noticias/entrevista-begona-cristeto-secretaria-general-de-industria-y-de-la-pequena-y-mediana-empresa).

It has opened an increasing public debate about the creation of a Spanish Space Agency. TEDAE<sup>68</sup> has shown a positive reaction, based on the necessity of “one voice, one strategy”,<sup>69</sup> and it would prefer a kind of governmental agency, based in the reorganization of the existing resources and, just in case of necessity, in exceptional new resources, due to the economical and financial crisis. It should suit for Spain’s needs (it should not be as big as NASA or CNES) and the UK Space Agency could be a desirable model.

## V. Conclusion

Spain, despite this long and intense space history, has, up-to-date, two goals to achieve: on the one side, to enact a comprehensive national space legislation, which should rule, at least, the main aspects about space activities, according to our international and European obligations; on the other side, to create a space agency, which should play a role as the main coordinator for strategic decisions in our (civil) space programme and to provide a single voice for Spanish space objectives and interests.

However, due to the political changes happened after the national elections held on 20 December 2015, one question arises: will the new government ensure the success of both projects?

If these doubts disappear and if these objectives are achieved, Spain, hosting for the ESA Ministerial Council scheduled for 2019, will have a great and unique opportunity to show greater coherence and visibility as a space power and to raise international and national awareness as to the legal-institutional and technological-industrial capabilities in the Spanish space sector.<sup>70</sup>

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68 *Asociación Española de Empresas Tecnológicas de Defensa, Aeronáutica y Espacio* (Spanish Association of Technology Industries).

69 [www.tedae.org/es/noticias/quien-gobierna-el-espacio](http://www.tedae.org/es/noticias/quien-gobierna-el-espacio).

70 Additionally, the 2019 ESA Ministerial Council will coincide with EU preparations for the next financial plans 2021-2027, which are expected to include a sizeable heading on space activities equal to or greater than the current heading in this regard.

