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Lift-Off of Space Governance in Spain: The Creation of the Spanish Space Agency

ABSTRACT: *The space sector represents a strategic industrial cluster in global terms that makes a major contribution to industry, environment, communications, and defence, amongst other domains. Outer space holds enormous potential, which has already been noticed by private operators who regard it as an appealing business opportunity. The importance of the space sector for the Spanish industry has remained constant and has only increased over the last few decades, making apparent the pressing need to bring together under a single public body the competences in space matters which are institutionally dispersed in our country. After several years of persistent demand from the Spanish space industry, the National Security Strategy was adopted in December 2021. This document raised the sector's hopes by announcing, as one of its lines of action, the intention to establish a Spanish Space Agency to promote the national industry and international cooperation with other similar organisations and/or organisations of interest in the field. In this context, since the adoption of the said Strategy, the Spanish space sector has been the target of a recent regulatory and institutional development, culminating in the creation of the long-awaited Spanish Space Agency on March 7th, 2023. Such an administrative evolution is the subject of this paper, whose main purpose is to conduct an analysis of all the provisions approved during the years 2021 to 2023 that concern our national space sector as a reference for those interested in the topic regarding what has happened in the Spanish space industry throughout recent years.*

KEYWORDS: *space industry, international cooperation, national security, Space Council, Spanish Space Agency.*

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1. Introduction

The significant role that Spain has played in the space community since its earliest development in the 1950s is undisputed.¹ The Spanish space industrial sector is characterised by its strategic significance from a worldwide perspective due to its specific weight in the overall industrial production, its role as a driving force for the innovative ecosystem and other industries, and its ability to reshape the national economy and labour market.² Spain is not only a member of some of the most relevant space-related international organisations, such as the European Space Agency (ESA) and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), but also participates in both ESA's main projects and optional programmes, such as Galileo, the International Space Station (ISS), and the Earth Observation Programme.³ Moreover, Spain is an active contributor to the European Union Space Programme Agency (EUSPA) and ESA, with the latter being the largest source of return on Spanish public investment in the space industry.⁴

In 1963, in view of the then scientific and technological research progress in outer space, the National Space Research Commission (CONIE) was founded by means of Act 47/1963 of July 8th, which established a domestic structure that would enable the country to benefit from such industrial advancement and to avoid falling behind neighbouring countries.⁵ Nevertheless, this primaeval public body instituted to coordinate and promote the programmes of the different national Research Services or Institutes was abolished following the entry into force of Act 13/1986 of April 14th, on the Promotion and General Coordination of Scientific and Technical Research, whose sixth additional provision stipulated that the functions of CONIE were to be assumed by the Inter-Ministerial Commission for Science and Technology (CICYT).⁶

1 Of particular note, for instance, is the interface in 1951 between the National Institute of Aeronautical Technology (INTA) and the US National Advisory Committee for Aeronautics (NACA), NASA's forerunner, for the exchange of information on aeronautical matters. See Muñoz Rodríguez, 2015, p. 588.

2 Royal Decree 158/2023 of March 7th, approving the Statute of the State Agency 'Spanish Space Agency', preamble (I).

3 De Faramiñán Gilbert, 2022, pp. 95–96.

4 Royal Decree 158/2023, preamble (I).

5 Act 47/1963, preamble.

6 CICYT was created by Act 13/1986 as a planning, coordination, and follow-up body for the then National Plan for Scientific Research and Technological Development. Nonetheless, its main competences were taken over by the Government Delegate Commission for Science and Technology Policy, in accordance with Royal Decree 326/2009 of March 13th, which allotted functions to it; and by the Ministry of Science and Innovation, pursuant to Royal Decree 1183/2008 of July 11th, which developed its basic organisational structure. See Royal Decree 332/2009 of March 13th, abolishing the Inter-ministerial Commission for Science and Technology provided for in Act 13/1986.

As time progressed, these tasks of national scientific-technological research and international representation of the sector were assigned by both Act 47/1963 and Act 13/1986⁷ to the National Institute of Aeronautical Technology ‘Esteban Terradas’ (INTA)⁸ and the Centre for Technological Development and Innovation (CDTI).⁹ As of then, these two organisations have been in charge of managing Spain’s presence in both ESA¹⁰ and the European Union (EU) space programmes for the past decades, together with the different Ministries to which a series of competences in space matters have been allocated: Science and Innovation; Industry, Trade, and Tourism; Transport, Mobility, and Urban Agenda (formerly known as the Ministry of Development); and Defence. However, this institutional dispersion among diverse governmental entities was a source of concern and unease in the Spanish space industry, as our bordering countries already possessed a sole public body responsible for overseeing their national space activities.

Upon an initial attempt in 2005 by the Senate Committee on the ‘Progressive increase of Spain’s participation in the European Space Agency’, instructing the government to constitute a Spanish Space Agency committed to coordinating and managing all the resources dedicated to space;¹¹ ten years later, in 2015, the Ministries of Economy and Competitiveness, Development, Defence, and Industry stepped up to the plate again. To this end, they declared the start of a series of works aimed at *‘creating a body, let’s call it an agency, national commission or general directorate’*, integrating all these competences.¹² Despite five successive years of inactivity on this initiative, on May 27th, 2021, before the Joint Commission on National Security of the Congress and the Senate, Iván Redondo (the then Director of the Cabinet of the Presidency of the Government) announced the creation of a Spanish Space Agency.¹³ For a moment, it was feared that this was yet another of the government’s intentions, which, as had happened in previous efforts, would remain a dead letter.

7 This normative text was subsequently repealed by Act 14/2011 of June 1st, on Science, Technology, and Innovation, currently in force.

8 Act 47/1963, preamble. INTA was established in 1942 as a Public Research Organisation (OPI), specialised in aerospace research and technological development, attached to the State Secretary for Defence. See Royal Decree 925/2015 of October 16th, approving the Statute of the National Institute for Aerospace Technology ‘Esteban Terradas’, preamble.

9 Act 13/1986, sixth additional provision. CDTI is a state-owned business entity, dependent on the Ministry of Science and Innovation, which promotes innovation and technological development in Spanish companies, identifying priority technological areas and implementing management programmes to support technological innovation. See arts. 1 to 3 of Royal Decree 1406/1986 of June 6th, approving the Regulations of the Centre for Technological and Industrial Development; and art. 36 of Act 27/1984 of July 26th, on Reconversion and Reindustrialisation.

10 Giménez and Malet, 2023.

11 Sánchez Mayorga, 2021, p. 7.

12 La Vanguardia, 2015.

13 Guerrero, 2021; Pons Alcoy, 2022a, p. 10.

On this occasion, nonetheless, the position was maintained, as subsequently reflected in the 2021 National Security Strategy (published at the end of the year), in its nineteenth line of action, which sets as an objective the establishment of the long-desired agency. From that moment on, the Spanish legislator began to introduce gradual changes in the institutional structure of public administrations with the intention of progressively ensuring that, first, more funds would be allocated to scientific development and research in the space sector, and, second, that the bureaucratic procedures necessary to set up the future Spanish Space Agency would be carried out in a definitive manner.

For the purposes of this paper, an examination will be provided concerning the recent normative and institutional achievements in the quest for a Spanish Space Agency, comprising the period from 2021 to 2023, by delving into the various legal and policy documents issued during those years with respect to recognising the need for such an entity, and the ensuing creation of the same on March 7th, 2023. Accordingly, non-Spanish speakers are presented with a holistic and detailed overview of the road to the inception of the Spanish Space Agency from the ground up.

2. Recent developments within the space industry in Spain: Towards the creation of the Spanish Space Agency

2.1. 2021 National Security Strategy

In spite of the domestic space industry echoing for years the need for a space agency to take responsibility for bringing together the competences related to the design and operation of space activities in Spain, it was not until the end of 2021 that the yearning to set up a Spanish Space Agency was explicitly articulated for the first time in Royal Decree 1150/2021 of December 28th, approving the 2021 National Security Strategy.¹⁴

This National Security Strategy is the third of its kind drawn up by the National Security Council since the original National Security Strategy was approved in 2011 and revised in 2013, and it constitutes the strategic political framework of reference for the National Security Policy. Its goal is to analyse the geopolitical environment, specify the risks and threats that affect the security of the state, define the strategic

¹⁴ The 2021 National Security Strategy is based on the adoption of the European Security Strategy of December 12th, 2003. This strategy offered an analysis of the disparate security concerns and potential disruptions to the world order, such as terrorism, the proliferation of weapons of mass destruction, and organised crime, to which other global challenges were added, including cybersecurity, following the adoption in 2008 of the Report on the Implementation of the 2003 European Security Strategy. See Zafra Riascos, 2017, p. 172. For further details on this and other EU security and defence strategies, see Almenar Rodriguez, 2023.

lines of action in each operational setting, and promote the optimisation of existing resources, as provided for in art. 4(3) of Act 36/2015 of September 28th, on National Security; the content of which is fully reproduced in the preamble to Royal Decree 1150/2021.

The literal wording of the aforementioned clause also stipulates that the National Security Strategy in force may be reviewed after a five-year period or, when required, by a significant shift in the circumstances of the strategic environment. The main reason for the adoption of the new 2021 National Security Strategy laid precisely in the second scenario, as stated by President of the Government Pedro Sánchez:

the evolving circumstances, presented in Spain and globally by the situation of the COVID-19 pandemic made it necessary to bring forward the period of renewal of the National Security Strategy in force since 2017 in order to adapt it to the changing condition in the areas of National Security (...) which oblige all public authorities to deepen the way to guarantee the rights and welfare of citizens, ensuring the defence of Spain and its constitutional principles and values.

Chapter III, which evaluates a series of risks and threats to national security,¹⁵ including menaces derived from the use of cutting-edge technologies that add complexity to the protection of individuals' fundamental rights, is worth mentioning. By way of illustration, access to outer space is expressly cited as an example of these hazards and thereafter designated as a 'new area of competition' that is key to national security because of the services it provides and which require new areas of operation. Consequently, the vulnerability of the space sector is underlined on a two-fold basis.

On the one hand, it highlights the geopolitical, strategic, and commercial nature of outer space, taking the placement of satellite constellations and commercial launchers as a case in point, and voices a worrying trend in the market for the same. Several non-EU-based operators are positioning themselves in a dominant stance, threatening access to space services and launches. On the other hand, the absence of a specific Spanish legislative framework governing space activities and services is

¹⁵ As the present Strategy, the 2017 National Security Strategy (its predecessor), approved by Royal Decree 1008/2017 of December 1st, comprised in its Chapter IV the different threats and challenges that were perceived in relation to national security, about which it asserts: '*Such threats and challenges do not exist in isolation, but are interconnected, their effects cross borders, and often materialise in global common spaces, such as (...) outer space*'. The vulnerability of outer space is thus addressed. Nevertheless, unlike the 2021 National Security Strategy, the only reference to outer space is to satellite and anti-satellite technology and to the opportunities and risks they both entail.

emphasised,¹⁶ which ‘*facilitates irregular activity in outer space, and makes it difficult to protect strategic assets such as satellite communications, positioning, and timing systems or earth observation satellites*’.

Such a vulnerability is due to the fact that these global common spaces, among which outer space is pinpointed, are ‘*connecting spaces characterised by their functional openness, lack of physical borders and easy accessibility*’. As a result, security in these domains is weakened since, owing to their extension, poor regulation, and the lack of sovereignty, the attribution of liability for the commission of crimes and/or felonies becomes more cumbersome. For this reason, it is necessary for Spain to adhere to international initiatives aimed at guaranteeing the peaceful use of outer space, especially those space programmes developed within the EU. International cooperation is a core principle of international space law, underscoring the need for the development of space security policies based on it and on which the collaboration of all the actors involved pivots.¹⁷

This scenario finally led to what, in my opinion, constitutes the most significant contribution of the 2021 Strategy to the space sector, that is, the proposal for the creation of a Spanish Space Agency (sixteenth line of action) in the following terms:

The creation of a Spanish Space Agency will aid to organise competences and establish a national policy to guide both the public and private sectors. This will maximise the return on investment, foster public-private partnerships, facilitate the dual use of space capabilities, and strengthen the national space industry in a clear and coherent manner. In addition, the Agency will represent Spain internationally in the space sector.

In this vein, its nineteenth line of action identifies as an objective for space security to ‘*Create the Spanish Space Agency, with a component dedicated to National Security, to lead the effort in space matters, efficiently coordinate the different national bodies with responsibilities in the space sector, and unify international collaboration and coordination*’. Given the accelerated evolution of the sector in recent years due to the interest generated by private operators for the commercial use of outer space, it is essential for space competences to be centralised under a single specialised body that enables the efficiency of their exercise.

16 Such a disquiet has been repeatedly manifested in the Spanish space legal doctrine; see González Ferreiro, 2023; Harillo Gómez-Pastrana, 2023b; Díaz Díaz and Chaves Sánchez, 2023; Piris Cuiza, 2023; Harillo Gómez-Pastrana, 2022; De Faramiñán Gilbert, 2022; Moro Aguilar, 2021; González Ferreiro, 2021; González Ferreiro, 2019; Muñoz Rodríguez, 2015; etc.

17 See Mayo Muñoz, 2014.

2.2. The Aerospace Strategic Project for Economic Recovery and Transformation (PERTE) and the establishment of the Space Council

On March 22nd, 2022, the Council of Ministers approved the agreement, declaring the Project for the Aerospace Sector as a Strategic Project for Economic Recovery and Transformation (PERTE),¹⁸ promoted by the Ministry of Science and Innovation.¹⁹ This is an instrument of a public-private collaborative nature aimed at boosting science and innovation in the aerospace field, providing tools to the sector to face upcoming challenges including climate change, global security, and digital transition. Hence, its specific objectives in space matters are *'to improve the capabilities of the space sector in the design of payloads related to environmental control, quantum communications, and security in international cooperation; and to position the space sector on the European map for the commercial use of space'*.²⁰

The strategic project is intended to strengthen the capacity of the space industry, allowing public administrations, companies, and research centres to work in continuous collaboration to encourage the development and incorporation of new technologies. Likewise, as it is a project of a distinctly international character, its aim is to consolidate Spain's position in the space sector through initiatives such as the creation of the Spanish Space Agency, which will contribute to coordinating space activities at the national level and foster Spanish participation in international programmes.²¹

For the purposes of the foundation of such an Agency, it is noteworthy Royal Decree 447/2022 of June 14th. Art. 1 of this regulation modified art. 18(1) of Royal Decree 139/2020 of January 28th, which lays down the basic organisational structure of the ministerial departments by adding a final letter d) to include the Commissioner for the Aerospace PERTE as a management body within the structure of the Ministry of Science and Innovation. In this sense, art. 2 of Royal Decree 447/2022

18 The Strategic Projects for Economic Recovery and Transformation (PERTE), as projects in general terms, are created within the framework of the Recovery, Transformation, and Resilience Plan, which constitutes the Spanish strategy to channel the funds delivered by the EU (e.g. the NextGenerationEU funds) to repair the damage caused by the COVID-19 crisis, and, through a series of reforms and investments, to build a more sustainable future. For further information, see <https://planderecuperacion.gob.es/>

19 See <https://planderecuperacion.gob.es/noticias/el-gobierno-espanol-prepara-la-creacion-de-una-agencia-espacial-espanola-y-un-perte>

20 See [https://www.lamoncloa.gob.es/consejodeministros/referencias/documents/2022/refc20220322v02%20\(2\).pdf](https://www.lamoncloa.gob.es/consejodeministros/referencias/documents/2022/refc20220322v02%20(2).pdf), p. 57.

21 *Ibid.* Amidst the initiatives for which the collaboration of the Spanish space sector is envisaged, the development of the Atlantic Constellation (an Earth observation satellite programme to monitor phenomena, namely climate change), together with Portugal, is remarkable. For more information, see <https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/ciencia-e-innovacion/Paginas/2022/041122-constelacion-atlantica.aspx>

also implemented modifications to the basic organic structure of the Ministry of Science and Innovation in two of its precepts by amending Royal Decree 404/2020 of February 25th.

1^o. The wording of paragraph four of art. 1 was revised, in the same way as art. 18 of Royal Decree 139/2020, so that besides the executive bodies of the Ministry of Science and Innovation (established prior to June 15th, 2022), the Commissioner for the Aerospace PERTE was incorporated.

2^o. An additional provision is introduced in the regulation (art. 7) that aims to develop the major functions of the Commissioner for the Aerospace PERTE (first paragraph), inter alia the promotion of the Spanish space sector through the adoption of different measures, strategies, and policies within the framework of the PERTE itself. Furthermore, it is also entrusted with the coordination of the activity of both the Aerospace PERTE Inter-ministerial Working Group and the Aerospace PERTE Alliance and with undertaking as many actions as needed for the establishment of the Spanish Space Agency, in particular, by advising and providing technical support to the Space Council in the performance of its functions and competences.

The following units reporting institutionally to the Commissioner for Aerospace PERTE (second paragraph) were also established: the Technical Space Office, which is responsible for most of the functions attributed to the Commissioner, and the Special Delegation for the Spanish Space Agency, tasked with dealing exclusively with matters relating to the creation and operation of the Agency,²² specifically in coordination with the Space Council.

Regarding the latter, the Space Council was instituted by Royal Decree 452/2022 of June 15th, which creates and regulates its composition and functioning '*in order to guarantee the success of the future approval of a Statute for the Spanish Space Agency, as well as the constitution and operation of this public body*'.²³ These were the functions entrusted to it (art. 2):

- a) *To analyse and make a non-binding report on the functions and competences that correspond to the Spanish Space Agency.*
- b) *To draw up a non-binding report on the statutes and initial action plan of the Spanish Space Agency²⁴ for submission to the ministerial departments to which this public body is attached.*

22 In this regard, for the very functional rationale behind the creation of such a body, the Special Delegation for the Spanish Space Agency was abolished as of the date of entry into operation of the Agency, pursuant to the third additional provision, first section of the AEE's Statute.

23 Royal Decree 452/2022, preamble.

24 Reference should be made to art. 91(3) of Act 40/2015 of October 1st, on the Legal Regime of the Public Sector, according to which: '*The preliminary draft act for the creation of the public body submitted to the Council of Ministers must be accompanied by a proposal for statutes and an initial action plan, together with the mandatory favourable report of the Ministry of Finance and Public Administrations, which will assess compliance with the provisions of this article*'. Similarly, arts.

c) Any other function that is within the scope of the Council's own competences may be allocated to it.

The nature of its tasks demanded the joint work of every ministerial department with responsibilities in this area.²⁵ For that reason, it was set up as an interministerial collegiate body administratively integrated within the Ministry of Science and Innovation through the Commissioner for the Aerospace PERTE (art. 1). Moreover, these functions also conditioned its existence, as when the Spanish Space Agency was set up, the Space Council was dissolved, since its purpose had already been fulfilled (art. 6).²⁶

As for its composition, the Space Council was composed of the Commissioner for the Aerospace PERTE (who held the Chair) and designated representatives from several Ministries (acting as Vice-Presidents), as well as a representative of each of the National Intelligence Centre and the Cabinet of the Presidency of the Government (art. 3). The Council operated in Plenary, meeting ordinarily a minimum of four times a year,²⁷ and its resolutions required a majority vote to be adopted (art. 4). Similarly, there was the possibility of assembling working groups on specific topics, such as the drafting of reports, if deemed fruitful; nevertheless, their proposals were not binding (art. 5).

92 (on the content and effects of the action plan) and 93 (on the content of the statutes, which the Space Council must respect when drawing up both documents in order to fulfil its mission) should also be taken into consideration. The Statute of the Spanish Space Agency was expected to follow the line of those approved for the State Aviation Safety Agency (see Royal Decree 184/2008 of February 8th, approving the Statute of the State Aviation Safety Agency) and the State Meteorology Agency (see Royal Decree 186/2008 of February 8th, approving the Statute of the State Meteorology Agency), among others.

25 Pons Alcoy, 2022a, p. 9.

26 Compliant with art. 96(1)(c) of Act 40/2015, establishing the dissolution of state public bodies when '*their purposes have been completely fulfilled, so that the survival of the public body is not justified, and this has been shown in the effectiveness control*'. Concerning the procedure for dismantling the body, the second section of the aforementioned art. 96 should be consulted. Accordingly, in the same vein as the Special Delegation for the Spanish Space Agency of the Ministry of Science and Innovation, the Space Council ceases to be operational in accordance with the second paragraph of the sole derogatory provision of the Statute of the Agency, whereby '*Royal Decree 452/2022 of June 15th, which creates and regulates the composition and operation of the Space Council, is repealed with effect from the entry into operation of the Spanish Space Agency*'.

27 It may also meet extraordinarily when so decided by the President, on their own initiative or at the request of at least half of its members. The first meeting for its formal constitution took place on July 11th, 2022. See <https://www.ciencia.gob.es/Noticias/2022/Julio/El-Consejo-del-Espacio-se-reune-por-primera-vez-para-constituir-formalmente-este-organo-interministerial.html>

3. Regulation of the Spanish Space Agency (AEE)

3.1. Characteristics, functions, and aims

After these bodies were instituted to render the Spanish Space Agency operational, Act 17/2022 of September 5th (amending Act 14/2011 of June 1st, on Science, Technology, and Innovation) gave significance to the aforementioned nineteenth line of action of the 2021 National Security Strategy, as it finally authorised the creation of the Spanish Space Agency (AEE),²⁸ attached to the Ministries of Science and Innovation and Defence.²⁹ Drawing upon the content of that line of action, which expressed that the AEE should have 'a component dedicated to National Security', it is not unexpected that the Agency is administratively dependent on two Ministries, showcasing a dual affiliation instead of a single one.

This authorisation is foreseen in the third additional provision of the Act, entitling the establishment of the AEE, the first paragraph of which describes its main characteristics and pursuits.

In agreement with the provisions of art. 91 of Act 40/2015 of October 1st, on the Legal Regime of the Public Sector, the creation of the State Agency 'Spanish Space Agency' is authorised, with the status of a state agency, attached to the Ministries of Science and Innovation, and Defence, which shall have as its general purposes, among others, the promotion, execution, and development of research, technological development, and innovation in the field of space, national security and defence, operations in the outer space field, satellite applications for the development of departmental competences, as well as the use of data furnished by satellites, and the technological and economic impact of the industry associated with the design, construction, operation, and maintenance of space systems, the strengthening of the national space industry, the state and international coordination of Spanish space policy, in full liaison with the European

28 By means of this authorisation, the requirement enshrined in art. 91 of Act 40/2015, in relation to the creation of state public bodies by law, is fulfilled. Accordingly, this Act must establish 'the type of public body it creates, with an indication of its general purposes, as well as the Department of dependence or affiliation', and 'where appropriate, the economic resources, as well as the peculiarities of its personnel, contracting, property, tax, and any others which, due to their nature, require a regulation with the status of law'.

29 Regarding the Ministry of Defence, it is interesting to note the rechristening of the traditional Spanish Air Force as the new 'Air and Space Force' (through Royal Decree 524/2022 of June 27th, providing for the renaming of the Air Force as the Air and Space Force), therefore recognising the strategic and military importance of outer space to national interests. On this topic, see Díaz Díaz, 2022a.

Space Agency and with the space policies and programmes developed within the European Union and the international organisations to which Spain is a member, through the competitive and efficient allocation of public resources, the monitoring of the actions financed and their impact, and advice on the planning of actions or initiatives through which R&D&I policies are implemented in the sphere of competence of the General State Administration.

Quoting MAYENCE, 'National space agencies are strange animals,' since, under this terminological umbrella, a diversity of institutional structures can be embodied (ranging from administrative bodies to coordinating interdepartmental offices operating under national government authorities).³⁰ As for the AEE, its constitution has been conceived in the regulations as a state agency.³¹ Following art. 108 bis, paragraph one of Act 40/2015 of October 1st, on the Legal Regime of the Public Sector:

State agencies are public law entities, endowed with public legal personality, their own assets, and autonomy in their management, empowered to exercise administrative powers, which are created by the Government for the fulfilment of the programmes corresponding to the public policies developed by the General State Administration within the scope of its competences.

Its designation must necessarily and expressly include the indication of 'State Agency', together with the name it receives. Therefore, as a state agency (and, more generically, as a state public body) the regulations set out in Chapter II 'On State public bodies' of Act 40/2015 must be observed for its creation.

In addition, the third paragraph of the third additional provision of Act 17/2022 prescribes that:

The Government shall approve, within a maximum period of one year, the statute of the State Agency 'Spanish Space Agency', which shall ensure the balanced presence of the different ministerial departments with competences in science, innovation, defence, transport, and mobility, geospatial

³⁰ Mayence, 2023, p. 8.

³¹ 'In line with the actions identified, and after carrying out a comparative study of the possibilities granted by Act 40/2015 of October 1st, and assessing the potential functions to be assumed by a future Spanish Space Agency, it was decided to opt for the figure of the State Agency'. See Order TER/947/2022 of October 4th, which publishes the report of the Consultative Commission for the determination of the headquarters of the future Spanish Space Agency and the agreement to open the period for the presentation of candidatures.

information, georeferencing, telecommunications, environmental control, security, industry, agriculture, and fisheries, among others, in its governing bodies.

The relevance of the same stands in art. 108 *ter* of Act 40/2015, the wording of which establishes that state agencies are governed by this same Act (alongside other rules of administrative law) and primarily by their own statutes. Consequently, this provision is significant in that the legislator imposed a one-year term on both the approval of the Statute, for which the Space Council was responsible, and on the Space Council body as such. Ultimately, upon the proposal of the Ministers of Science and Innovation, Defence, and Finance and Public Administration, on March 7th, 2023, Royal Decree 158/2023³² was published in the Spanish Official State Gazette, approving the Statute of the Spanish Space Agency. It consists of 9 chapters and 43 articles covering the basic rules governing the organisation and operation of the AEE.

Its main purpose is *'to use space for the benefit, knowledge, and security of Spanish society, and to establish, promote, and coordinate all those activities and policies that enable research, technological, and industrial development and innovation in the field of space'* (art. 2(1)). National space agencies serve as the intermediary between public governance and the domestic space sector (including industry, academies, and users), and their key responsibilities are to facilitate the development of high-tech capabilities in relation to space, identify the needs for space products and applications, and coordinate the policy and legal framework for space activities.³³

With respect to the Agency's objectives, the norm offers a dual-nature classification based on their scope: (a) the general aims (art. 2(2)), that is, those lines of action to be sought within the range of operation of the AEE (transliterating verbatim the content of the third additional provision of Act 17/2022), and (b) the specific aims (art. 2(3)), which seek to concretise these broad guidelines, and are as follows:

- a) *To contribute to national security and to support actions to guarantee the security and defence objectives in relation to space set out in the National Security Strategy, the National Aerospace Security Strategy,³⁴ and the National Defence Directive.*

³² The means of publication of the Statute, that is, by Royal Decree, is noteworthy. This administrative figure is designed for the regulatory development of provisions provided for by law, which explains in legal terms the choice of such an instrument, and not any other, in view of the authorization of the establishment of the Agency under the third additional provision of Act 17/2022. Notwithstanding the fact that, in principle, Royal Decrees are restricted exclusively to cases of urgent need in the Spanish legal regime, as the AEE is a government creation, its use has been deemed appropriate. See Harillo Gómez-Pastrana, 2023a, p. 338; Medina Castro, 2023, p. 353.

³³ Mayence, 2023, p. 8.

³⁴ The adoption of a National Aerospace Security Strategy was approved by the National Security Council at its meeting of April 12th, 2019 (Order PCI/869/2018 of August 3rd, publishing the

- b) *To promote, at European and international levels, the excellence of Spanish space-related science, innovation, and technology.*
- c) *To stimulate and boost the national space industrial sector.*
- d) *To defend the interests of national users and respond to the demands of public policies in international fora and decision-making groups in the space field.*
- e) *To strengthen the necessary coordination to maximise the efficiency and effectiveness of the financial resources available for security, research, innovation, technology, development, industry, and programmes in the space realm.*
- f) *To exercise national representation in the various international fora in the space field, providing coherence and supporting the interests of the different departments without prejudice to the rules of the second final provision of the Royal Decree.*
- g) *To contribute to the space policies of the international organisations of which Spain is a member.*
- h) *To foster and coordinate laboratories and technical establishments dedicated to technological development in the space sector that may be associated with the Agency.*
- i) *To advance research in the space domain and ensure the publication of scientific work in this field.*

For the accomplishment of such goals, the AEE has been endowed with a large number of competences (art. 5), including the signing of bilateral or multilateral cooperation agreements, conventions, or other legal instruments with public bodies (e.g. space agencies) or private entities to guide the development of space activity;³⁵

Agreement of the National Security Council, approving the procedure for the elaboration of the National Aerospace Security Strategy), and published by Order PCI/489/2019 of April 26th. On the National Aerospace Security Strategy, see González Ferreiro, 2021.

35 Some recent examples from shortly after the Agency became operational are prominent. By way of illustration, the first bilateral agreement of the AEE was the signature of a Memorandum of Understanding (MoU) with the Mexican Space Agency (AEM) for the establishment of a collaborative framework for cooperation in the use and exploration of outer space for peaceful purposes. See <https://www.europapress.es/sociedad/noticia-espana-mexico-firman-acuerdo-explorar-espacio-ultraterrestre-fines-pacificos-20230629201316.html>. Moreover, Spain's adherence to NASA's Artemis programme on May 30th, 2023, should be underscored, thereby becoming the 25th signatory to the Artemis Accords, which '*establish a practical set of principles to guide space exploration cooperation among nations, including those participating in NASA's Artemis program*'. See <https://www.nasa.gov/press-release/nasa-welcomes-spain-as-25th-artemis-accords-signatory>. Following this line of thought, HARILLO GÓMEZ-PASTRANA is of the opinion that '*the next logical step would be to sign a MoU with the Luxembourg Space Agency on similar terms as the other countries, bearing in mind that many of the countries that have adhered to the former [i.e., the Artemis Accords] are also signatories to the latter, and this action would come to reinforce the need to act in a coordinated manner in something as relevant in the not too distant future as the use of natural resources in space.*' See Harillo Gómez-Pastrana, 2023c, p. 72.

the elaboration of a National Space Policy proposal; the identification of national objectives and priorities in the outer space environment; the design and coordination of a National Space Strategy³⁶ for the implementation of the national space policy through the allocation of public resources;³⁷ the encouragement of public-private partnerships (PPPs) in the space sector;³⁸ and the elaboration of a domestic space law proposal.

To this effect, the AEE shall observe the general principles governing the action of Spanish public administrations in addition to the principles of autonomy, technical independence, transparency, effectiveness, efficiency, inter-institutional cooperation, and gender equality in the performance of its specific functions (art. 6). In accordance with its first additional provision, the entry into operation of the AEE is scheduled to take place with the constituent session of its Governing Board, which is to be held within a maximum period of three months from the entry into force of the Statute (i.e. the day after its publication in the Spanish Official State Gazette).³⁹

3.2. Headquarters

Prior to the set up of the AEE, the determination of its headquarters was judged to be an overriding condition, considering that the locality housing it might constrain

36 As mandated by the third additional provision, fifth paragraph of Act 17/2022.

37 Both the proposal and the implementation of a national space policy, together with national and international representation, have been highlighted as core tasks of space agencies. See ESPI, 2019b, pp. 18–20.

38 Public-Private Partnerships (PPPs) are a commonly used mechanism for formalising relations between private actors and the public sector. It is primarily employed in the provision of operational public infrastructure, in which the initial investment is borne by the private sector, which earns a return on the investment through the public authority's long-term engagement to operate the system on a large scale to satisfy its own needs. PPP models place the responsibility of up-front funding on the private partner, along with the burden of technological risk, as ownership of the infrastructure remains with the latter. In exchange, the public sector's compromises substantially mitigate the commercial drawbacks, and the industry is afforded wider autonomy in the design and execution of the programme than under a traditional public procurement scheme. See Vernile, 2018, p. 9. However, there is a troublesome context surrounding this figure in the Spanish legal system, since Act 9/2017 of November 8th, on Public Sector Contracts, transposing into Spanish law the Directives of the European Parliament and of the Council 2014/23/EU and 2014/24/EU of February 26th, 2014, abolished public-private partnership contracts (introduced by Act 30/2007 of October 30th, on Public Sector Contracts (art. 11)) on the grounds of an apparent lack of practical usefulness (preamble (IV)), given that their purpose can be achieved through other contractual modalities, namely the concession contract. On this matter, see Medina Castro, 2023, pp. 364–365.

39 This session was held on April 20th, 2023, chaired by the AEE's President, Diana Morant. See <https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/ciencia-e-innovacion/Paginas/2023/200423-morant-agencia-espacial-europea.aspx>

some of its final characteristics,⁴⁰ justifying the urgent processing of the procedure.⁴¹ For this purpose, the third additional provision of Act 17/2022, paragraph four, specifies that:

Pursuant to Royal Decree 209/2022 of March 22nd, which establishes the procedure for determining the physical headquarters of the entities belonging to the state institutional public sector and creates the Consultative Commission for the determination of headquarters, the choice of headquarters will be made following a transparent, open, and competitive procedure.

In the course of developing this norm, the Ministry of the Presidency, Relations with Parliament, and Democratic Memory approved the following orders, publishing a series of Agreements during the months of October to December 2022, aimed at establishing the procedure for determining the physical headquarters of the AEE:

- Order PCM/945/2022 of October 3rd, publishing the Agreement initiating the procedure for determining the physical headquarters of the Spanish Space Agency.
- Order TER/947/2022 of October 4th, publishing the report of the Consultative Commission for the determination of the headquarters of the future Spanish Space Agency and the Agreement to open the period for the presentation of candidatures.
- Order PCM/1202/2022 of December 5th, publishing the Agreement of the Council of Ministers of December 5th, 2022, which determines the physical headquarters of the future Spanish Space Agency.

40 Order PCM/945/2022 of October 3rd, which publishes the Agreement initiating the procedure for determining the physical headquarters of the Spanish Space Agency; preamble. For instance, the ultimate decision to make Seville the headquarters of the AEE has been troublesome in terms of workforce, due to the fact that, despite being a brand new state entity, its structure relies on the integration of staff coming from other official institutions and departments in existence for decades, who reside together with their families in the city of Madrid (or its surroundings), where the official bodies, institutions, and academic and research centres bound to the national space sector are clustered. Consequently, the decentralization pursued by the Government has proved to be a conflictive process, since many of those who were offered positions within the Agency have rejected the relocation for this very reason. See Martín, 2024; Harillo Gómez-Pastrana, 2023a, p. 339; Pons Alcoy, 2022b, p. 11; etc.

41 Declared on the basis of art. 6(9) of Royal Decree 209/2022, it is accounted for as follows: 'In addition, the Spanish Space Agency will have as one of its objectives the management of the space programmes included in the Aerospace PERTE. Given that the deadlines for the implementation of this recovery programme are very short for the complexity of space projects, it is important that the Agency be operational in the shortest possible time, justifying the urgent procedure for choosing its headquarters'. See *ibid*.

As declared in the fourth section, last paragraph, of the third additional provision of Act 17/2022, the first administrative step towards determining the physical headquarters of the AEE was to initiate the procedure by means of an Agreement of the Council of Ministers, in line with art. 6(1) of Royal Decree 209/2022.⁴² In the present case, the adoption of the Agreement took place at the meeting of the Council of Ministers on September 27th, 2022, and was subsequently published in the Official State Gazette by Order PCM/945/2022 on October 3rd.

Following art. 6(2) of Royal Decree 209/2022, the Consultative Commission⁴³ was given a one-month period after receiving the Agreement to prepare a report containing the list of criteria to be considered to designate the physical location of the AEE (art. 3(2)(b) of Royal Decree 209/2022). As a result, at its meeting on September 29th, 2022, the Commission approved the report, which was communicated to the Council of Ministers at its meeting on October 4th, 2022, and published in Order TER/947/2022. The means for presenting candidatures were indicated in the latter, which had to be accompanied by a justification report and a briefing reflecting the level of compliance with the criteria established in the Commission's report (art. 6(4) of Royal Decree 209/2022). A period of one month was set from the publication of Order TER/947/2022, and by the deadline of November 7th, 2022, 21 applications were received.

The results were published in Order PCM/1202/2022 once the Council of Ministers had assessed the opinion submitted by the Consultative Commission with its recommendation.⁴⁴ Thus, by means of an Agreement of the Council of Ministers, approved at its meeting of December 5th, 2022,⁴⁵ Seville was designated the physical headquarters of the AEE (by considering it to be the one that best met the requirements requested), and has hereby been recorded in the fourth paragraph of art. 1 of the Statute.

42 It should be added that this norm enables the possibility of agreeing to initiate the procedure prior to the creation of the Agency. Nevertheless, to achieve this, it requires the Agreement instituting the proceeding to be complemented by a report stating the nature, functions, and number of employees, as well as other aspects considered pertinent to the choice of headquarters.

43 This Commission, affiliated to the Ministry of Territorial Policy, was the body that assisted the Council of Ministers in the process of choosing the headquarters. Chaired by the then Minister of Territorial Policy, Isabel Rodríguez, its members included representatives of the various Ministries. See <https://www.ciencia.gob.es/Noticias/2022/Diciembre/El-Gobierno-acuerda-la-sede-de-la-Agencia-Espacial-Espanola-en-Sevilla.html>

44 Despite the fact that art. 6(7) of Royal Decree 209/2022 foresees that the Consultative Commission's opinion '*may take into consideration localities which have not been nominated but which meet the criteria*', it was the decision of the Commission not to assess other localities, and to limit itself to evaluating only the candidatures submitted for this purpose.

45 In this respect, the maximum period of six months for adopting the Agreement on the determination of the Agency's physical seat was met, counting from the date of the Agreement to initiate the procedure (art. 6(8) of Royal Decree 209/2022).

3.3. Organic structure

The organic structure of the AEE is set forth in Chapter IV of the Statute (arts. 7–22) and is divided into five sections encompassing the several bodies that compose the Agency. This structure must be considered under the premise that all the departments and Ministries competent in space-related matters in Spain are involved to some extent. Some of these are self-evident, such as the two Ministries to which the AEE is ascribed (Science and Innovation, and Defence), whereas others are incorporated in certain aspects touching on space activities, including environmental issues, air traffic impact, and those directly linked to industry, economy, and tax aspects.⁴⁶

3.3.1. Governing bodies: The Presidency and the Governing Board

According to art. 7 of the Statute, the two bodies entrusted with the governance and direction of the AEE are the Presidency and the Governing Board.⁴⁷

The Presidency (art. 8) is taken over by the Minister of Science and Innovation, who becomes the highest institutional and legal representative of the AEE, together with the Chairperson of the Governing Board (arts. 9 and 10) (the collegiate governing body of the AEE⁴⁸), with the command to oversee the fulfilment of its objectives, purposes, and functions. Other duties of the President consist mainly of convening meetings of the Governing Board; concluding collaboration agreements, MoUs, or any other legal instruments that may generate commitments and obligations for the AEE; seeking authorisation for any necessary budgetary variations; and proposing to the Governing Board, on the one hand, candidates for the position of Director of the AEE (subject to a report from the Minister of Defence), and, on the other hand, the appointment of members of the Supervisory Commission and of the Committees supporting the Directorates.

The Governing Board is composed of the AEE President, in addition to some vice-presidents and vocals coming from the diverse Ministries and appointed by the Presidency. Furthermore, the AEE's Director, a person representing the Presidency of the Government, the Director of the Department of National Security, and the Director-General of INTA serve as spokespersons. Four individuals with speaking but non-voting status are also present: one of recognised prestige from the scientific-technical field, one representative of the national space industry sector, another of

46 Harillo Gómez-Pastrana, 2023a, p. 345.

47 In accordance with art. 90 of Act 40/2015, the highest governing bodies of public entities are the Presidency and the Governing Board; however, the relevant statute may provide otherwise.

48 The Governing Board shall meet at least every six months, but may hold extraordinary meetings by decision of the Presidency or at the request of at least half of its members.

the workers, and the AEE Secretary-General. Their terms of office run for a two-year period, with the possibility of a one-time reappointment.

Among its main responsibilities, the Governing Board supervises and controls the AEE's actions, advises the Council of Ministers on the formulation of the National Space Policy, submits the National Space Strategy for approval by the Council of Ministers (through the Ministries of Science and Innovation, and Defence), controls the management of the AEE's Director, and demands appropriate responsibilities, as well as other budgetary and operational matters. In cases where the Board's decisions may have certain implications, a series of conditions will be required: for instance, where security and defence are affected, both a report from the Directorate of Security and Planning and the favourable vote of the persons representing the Ministry of Defence and the Department of National Security of the Presidency of the Government on the Governing Board will be mandatory, and for those concerning operational satellite navigation services for which the Ministry of Transport, Mobility, and Urban Agenda is responsible, the favourable vote of the person standing in for that Ministry on the Governing Board will be requested.

3.3.2. Supervisory and Permanent Committees

The Supervisory Committee (art. 12) is integrated by four members of the Governing Board appointed by the latter at the proposal of the Presidency. Its principal functions encompass reporting to the Governing Board on the execution of the budget; submitting to the latter reports of an economic-financial, budgetary, or accounting nature for consideration or approval; to acknowledge the important information the Agency is required to prepare and submit it to the competent bodies in compliance with the legislation in force; and analysing the results of the evaluation and monitoring actions carried out by any of the control bodies of the AEE, as well as proposing the corrections it deems necessary.

The Permanent Committee (art. 13) is in charge of preparing meetings of the Governing Board and supporting it in several of its duties, namely control tasks and the preparation of proposals and policies. Additionally, it forwards information on the AEE's action plans and strategic and operational objectives (among them, the criteria and procedures for the efficient control of their fulfilment), assesses the information prepared by the Supervisory Committee regarding the AEE's internal procedures and economic-financial management, and prepares and proposes to the Governing Board the AEE's information and communication plan. This Committee consists of the Director of the AEE and a representative of each of the corresponding Ministries, who are also joined by a representative of the National Intelligence Centre, the Cabinet of the Presidency of the Government, and INTA.

Both Committees shall meet at least once every two months and extraordinarily whenever deemed appropriate by the Chairperson or at the request of the Governing Body.

3.3.3. *The executive body: The Directorate*

The Directorate (art. 14) is the highest executive body in the AEE.⁴⁹ To choose the person serving as the AEE's Director,⁵⁰ the President of the AEE is asked to submit to the Governing Council (which is in charge of appointing the Director) up to three candidacies for such a position, whose selection is entrusted upon an ad hoc Selection Committee convened by the President and integrated by six persons of recognised national or international prestige covering the areas of public management, science, and innovation ecosystem, national security and defence, human resources, space industry sector, and international relations.

The Director is expected to possess prestige and experience in the management of organisations with competence in the space field and in relations with international organisations and space policy, as well as familiarity with the national space technological and industrial framework and acquaintance with ESA and European organisations competent in the field of space, among others. The term of service is five years and is extendable for an additional period of two years. Considering that this is an executive position, its major role is to lead, coordinate, and manage the AEE and to perform key duties such as executing the AEE's budget and other related budgetary management (including, but not limited to, expenditure and payment arrangements). The Director also exercises, upon delegation of the Presidency, the institutional and legal representation of the AEE, and designates a representative of the AEE to the National Aerospace Security Council.⁵¹

49 Pursuant to art. 17, the Directorate shall have a Support Unit, a technical assistance body intended for advising the Director of the AEE on international affairs in liaison with the competent Ministry, and for aiding the Director in the compilation of the inputs from the Agency's directorates for the preparation of the draft space law proposal and of the annual budgets.

50 As per the first transitory provision of the Statute, '*Until the Director of the Spanish Space Agency is appointed in accordance with the provisions of art. 14 of the Statute, this position will be held temporarily by the Commissioner for the Aerospace PERTE*'.

51 The 2017 National Security Strategy listed ensuring the security of outer space as one of its goals, and, to this end, prescribed the constitution of a National Aerospace Security Council. This was carried out by means of Order PCM/218/2020 of March 13th, which publishes the Agreement of the National Security Council creating and regulating the National Aerospace Security Council. With regard to its legal nature, it is provided that the National Aerospace Security Council is a support body to the National Security Council, as per art. 20(3) of Act 36/2015 of September 28th, on National Security.

3.3.4. *Advisory bodies*

The advisory bodies (arts. 15 and 16) consist of three support committees (collegiate advisory and consultative bodies of a permanent nature) belonging to the Directorates of Programmes and Industry; Science, Technology, and Innovation; and Users, Services, and Applications. In particular, the first is entrusted to the Committee for Coordination with Autonomous Communities, whose purpose is to analyse, propose, and bring together strategies and programmes at the international level with space policies of an inter-territorial dimension. The second assigned body is the Science and Technology Committee, whose role, as its name indicates, is to evaluate, counsel, and suggest actions related to Spain's scientific and technological space needs. Finally, the third incorporates the Space Technology Users and New Applications Committee, which is tasked with providing advisory services and gathering and proposing measures to meet the needs and requirements of users, both in the public and private sectors, in connection with space missions to be identified within the AEE's purview.

Every Committee is composed of 12 members (one of whom shall be elected Chairperson via the internal rules of procedure) appointed by the Governing Board, at the proposal of the AEE's President, out of experts of renowned national standing or with expertise in the respective subject matter. Their term of office lasts for five years, with one-third being renewed biannually. The Committees shall meet regularly every four months and on an extraordinary basis whenever the head of the Directorate of Assignment deems it suitable.

3.3.5. *Organisational structure*

In terms of its organisational structure, art. 17 of the Statute determines that the AEE operates through the following bodies:⁵²

⁵² As of June 21st, 2023, the Governing Board approved the appointment of these individuals to take over these organs: Juan Carlos Sánchez (Brigadier General and advisor to the Second Air and Space Chief of Staff) was appointed Director of Security and Planning; Juan Carlos Cortés (Director of Space, Large Scientific Facilities, and Dual Programmes at CDTI) is the new Director of Programmes and Industry; Isabel Pérez (Deputy Director of Research, and PhD studies at ETSI Aeronautics and Space) was designated Director of Science, Technology, and Innovation; Nicolás Martín (advisor to the EU's Space Programme Committee) was named Director of Users, Services, and Applications; Julio Cárabe (Research Professor at the Centre for Energy, Environmental, and Technological Research (CIEMAT) in the Commission for the Aerospace PERTE) was elected Secretary General; and Eva Villaver (researcher at the INTA-CSIC Astrobiology Centre) was nominated Director of the Space and Society Office. See *La Vanguardia*, 2023; <https://www.aee.gob.es/en/AgenciaEspacial/MisionOrganizacion/EquipoDirectivo.html>

- a) Directorate of Security and Planning (art. 18). Its primary responsibilities can be categorised into two main areas: (a) the implementation of space security strategies, at both national and international levels (i.e. EU⁵³ and NATO⁵⁴), for which it supports the attainment of the objectives set out along their lines, harmonises the proposals of the different Directorates, including its own, for the preparation of the National Space Strategy, and integrates the plans of the Directorates within the framework of these strategies; and (b) ensuring the safety and sustainability of space assets, through their certification, monitoring of Space Surveillance and Tracking (SST) and Space Situational Awareness (SSA) activities, guaranteeing the reliable and safe conduct of space traffic, overseeing cybersecurity and the shielding of information from threats and risks, safeguarding the environmental sustainability of space activities, and establishing civil liability requirements for space operations, particularly insurance coverage and its supervision.
- b) Directorate of Programmes and Industry (art. 19). It aims to monitor and administer national space-related programmes (i.e. the coordination of a National Space Programme) and the proper use of funding for their development, as well as the management of Spain's participation in international or multilateral space programmes belonging to organisations such as ESA. In addition, it promotes private and public investment in the space sector for the furtherance of national interests through the creation and fundraising of startups.
- c) Directorate of Science, Technology, and Innovation (art. 20). Being responsible for R&D and technological advances across the entire space sector, this department is dedicated to the promotion and development of space technologies and scientific research in the space domain. To this end, it cooperates with universities and other public research institutions to foster the commercial exploitation of those technologies they have developed, and supports enterprises (especially SMEs) via programmes to boost innovation in the Spanish space industry, as well as to promote their collaboration with the above-mentioned organisations. It also coordinates ESA's scientific and technological development programmes, and encourages Spanish participation in international space science and technology cooperation projects.

53 On the EU Space Strategy for Security and Defence (whose proposal was brought forth jointly by the European Commission and the High Representative of the Union for Foreign Affairs and Security Policy, Josep Borrell, on March 10th, 2023), see Almenar Rodríguez, 2023.

54 In 2019, NATO not only acknowledged outer space as a new operational domain (along with air, land, maritime, and cyberspace) (see Pons Alcoy, 2021), but also adopted an overarching Space Policy aimed at guiding NATO's approach to outer space, which can be accessed through the following link: https://www.nato.int/cps/en/natohq/official_texts_190862.htm

- d) Directorate of Users, Services and Applications (art. 21), whose mission is the advancement and deployment of emerging technologies conducive to 'New Space'⁵⁵ applications (namely space tourism, orbital services, and space mining), both for public and private users, for which it shall coordinate between them in order to promote the use of these space applications in the two domains. Additionally, it enhances the development of the downstream⁵⁶ space industry and fosters the dual use of space and the utilisation of satellite services by enabling the creation of applications in different fields, such as navigation and data mining.
- e) General Secretariat (art. 22), whose core competences are threefold. First, it is in charge of the management and administration of human resources, including the selection of staff, together with the planning and implementation of the occupational risk prevention policy. Second, it handles the AEE's accounting and budgetary management, the collection and payment of receipts, and the administration of the AEE's treasury. Third, from a legal perspective, it conducts the investigation of disciplinary proceedings within the scope of the AEE's competences, provides legal advice to the Directorate and its organisation for the exercise of said competences, and coordinates the AEE's stance in the field of space law.
- f) Space and Society Bureau, which promotes public interest and awareness in outer space and the AEE's own projects through outreach campaigns.

4. Concluding remarks

These major institutional advances in space matters are a positive indication that Spain is finally progressing towards becoming a benchmark country in the space sector. On the one hand, the creation of the Space Council proved to be the definitive impetus needed to initiate the necessary actions to set up the Spanish Space Agency. In the words of DÍAZ DÍAZ, *'this initiative is of enormous importance for the Spanish*

⁵⁵ 'New Space' has been described as '*a disruptive sectorial dynamic featuring various end-to-end efficiency-driven concepts driving the space sector towards a more business- and service-oriented step*'. See ESPI, 2019a, p. 4. It has been suggested that the future of this momentum in the 'New Space' nascent ecosystem rests heavily on the implementation and success of new public policy. Most agencies are adjusting their strategies, approaches, and interaction methods with the private sector in order to adapt to and encourage the advent of private efforts, to establish new types of partnerships, and, to some degree, to redefine their role. This new environment allows for the sharing of costs and risks between the private and public sectors, potentially alleviating the financial burden on the public player. See ESPI, 2019b, p. 1.

⁵⁶ That is, end-user services and applications, including the launcher and operations segments. See Royal Decree 158/2023, preamble (I).

space sector, since it continues the demands made by the industry, and, in our opinion, will position Spain among the countries with an organisation capable of better managing space activity'.⁵⁷ On a personal note, I believe that the creation of the Space Council was indeed a significant step forward for the Spanish sector, as it finally materialised the desire to establish the Spanish Space Agency, which had been expressed since March 2021, through a specialised body conceived for the sole purpose of drawing up and approving the Statute of the newborn Agency.

The importance of the creation of the Spanish Space Agency has not been contested. Neighbouring nations with similar space capabilities have national agencies that are responsible for coordinating space activities at the domestic level. Thus, with this measure, Spain will finally be able to reach parity with them through a public body of a similar nature to theirs, which will bring together all the space competences currently distributed among different Ministries in order to unify Spain's representativeness and voice in the sector. The rationale behind the creation of the AEE is mainly due to administrative efficiency and international visibility, as Álvaro Giménez Cañete, former Special Delegate for the Spanish Space Agency of the Government and current advisor to the entity, has pointed out:

Spain needed to consolidate its position at the international level in the space field, and this required a single voice and a sole image to advocate for us. The European Space Agency, the European Commission, NASA or any other organisation demanded an interlocutor in Spain, and there was none. They had to go and talk to one Ministry or another depending on the subject. This is why it was crucial for us to constitute it.⁵⁸

In conclusion, the value added by national space agencies is manifold, ranging from raising the visibility of national investments in outer space to regulating space operations by, for instance, implementing a national space law. For this reason, the role to be played by the AEE in the proposal and drafting of a space regulatory framework in Spain is paramount in order to foster a national space industrial network supporting 'New Space' initiatives and to attract both domestic and foreign investment, thereby enabling the emergence of a new Spanish industrial ecosystem in the field of space applications.

Having reviewed the achievements on space matters to date, it is worth making a final observation on such shortcomings as those that still exist in terms of the domestic regulation of the sector. The 2021 National Security Strategy placed special emphasis on the absence of national regulation of space activities, which not only

⁵⁷ Díaz Díaz, 2022a, p. 15; Díaz Díaz, 2022b.

⁵⁸ Martín, 2024.

favours the irregular nature of activities conducted in outer space but also hinders the protection of certain strategic assets. Therefore, now that the Agency has become operational, the next step must necessarily be the enactment of a Spanish law on space activities, as included in the AEE's remit. This is imperative for the Spanish space sector, which has demonstrated its great potential on countless occasions and accordingly deserves the protection the Spanish legislator may provide.

Bibliography

- Almenar Rodríguez, R. (2023) 'Una mirada estratégica al espacio ultraterrestre: a propósito de la Estrategia espacial de la Unión Europea para la seguridad y la defensa,' *Observatorio Jurídico Aeroespacial*, Newsletter Nº 10, March 2023, pp. 51-61 [Online]. Available at: <https://aetae-aeroespacial.org/boletin-10-marzo-2023/> (Accessed: September 28th, 2023).
- De Faramiñán Gilbert, J. M. (2022) 'Spain's Challenges in the Aerospace Field: Towards the Creation of a Spanish Space Agency and the Adoption of a Global Space Law,' *Air & Space Law*, 47(1), pp. 93-110 [Online]. Available at: <https://kluwerlawonline.com/journalIssue/Air+and+Space+Law/47.1/20021> (Accessed: September 28th, 2023).
- Díaz Díaz, E. and Chaves Sánchez, E. (2023) 'El derecho nacional del espacio a examen: comparativa regulatoria de España e Italia,' *Observatorio Jurídico Aeroespacial*, Newsletter Nº 12, October 2023, pp. 37-58 [Online]. Available at: <https://aetae-aeroespacial.org/boletin-12-octubre-2023/> (Accessed: April 5th, 2024).
- Díaz Díaz, E. (2022) 'Iniciativas espaciales en España: Consejo del Espacio y Ejército del Aire y del Espacio,' *Observatorio Jurídico Aeroespacial*, Newsletter Nº 7, July 2022, pp. 14-18 [Online]. Available at: <https://aetae-aeroespacial.org/boletin-7-julio-2022/> (Accessed: December 15th, 2022).
- Díaz Díaz, E. (2022) *Oportunidades para el desarrollo de la industria espacial tras la creación del Consejo del Espacio* [Online]. Available at: <https://elderecho.com/oportunidades-para-el-desarrollo-de-la-industria-espacial-tras-la-creacion-del-consejo-del-espacio> (Accessed: December 15th, 2022).
- European Space Policy Institute (ESPI) (2019) *Executive Summary – Commercial Space Exploration: Potential contributions of private actors to space exploration programmes* [Online]. Available at: <https://www.espi.or.at/wp-content/uploads/2022/06/ESPI-Executive-Summary-Commercial-space-exploration-1.pdf> (Accessed: April 5th, 2024).
- European Space Policy Institute (ESPI) (2019) *ESPI Report 70 – Evolution of the Role of Space Agencies – Full Report* [Online]. Available at: <https://www.espi.or.at/wp-content/uploads/2022/06/ESPI-Public-Report-70-Evolution-of-the-Role-of-Space-Agencies-Full-Report.pdf> (Accessed: April 5th, 2024).
- Giménez, S. and Malet, L. (2023), *Spain – getting ready for the next steps in space exploration* [Online]. Available at: https://www.ibanet.org/spain-getting-ready-for-the-next-steps-in-space-exploration?sap-outbound-id=8AOC7F6496ADC805F28515AAB6BAE9F01353D9A3&utm_source=SAPHybris&utm_medium=email&utm_campaign=4101&utm_term=Space%20Law%20ebulletin%20Sep%2023___Spain%20%26ndash%3B%20getting%20ready%20for%20the%20next%20steps%20in%20space%20exploration&utm_content=EN (Accessed: September 29th, 2023).

- González Ferreiro, E. C. (2023) 'Principales ítems que debería incluir la Ley espacial española,' *Revista Española de Derecho Aeronáutico y Espacial*, 2023/3, pp. 371-421 [Online]. Available at: https://aetae-aeroespacial.org/wp-content/uploads/2024/01/R.E.D.A.E._2023_COLOR_OK_compressed-3.pdf (Accessed: April 5th, 2024).
- González Ferreiro, E. C. (2021) 'La regulación de las actividades espaciales como estrategia de seguridad y crecimiento nacional,' *Cuadernos de estrategia*, 208, pp. 213-294 [Online]. Available at: https://www.ieee.es/Galerias/fichero/cuadernos/CE_208_LosRetosDelEspacioExterior.pdf (Accessed: December 16th, 2022).
- González Ferreiro, E. C. (2019) 'Necesidad de una ley espacial española' [Online]. Available at: <https://www.hispaviacion.es/necesidad-una-ley-espacial-espanola/> (Accessed: April 5th, 2024).
- Guerrero, T. (2021) 'El Gobierno anuncia por sorpresa la creación de una Agencia Espacial Española que Duque había descartado' [Online]. Available at: <https://www.elmundo.es/ciencia-y-salud/ciencia/2021/05/27/60afd71cfdddff39b8b45da.html> (Accessed: December 16th, 2022).
- Harillo Gómez-Pastrana, R. (2023) 'Aproximación al Estatuto de la Agencia Espacial Española,' *Revista Española de Derecho Aeronáutico y Espacial*, 2023/3, pp. 334-350 [Online]. Available at: https://aetae-aeroespacial.org/wp-content/uploads/2024/01/R.E.D.A.E._2023_COLOR_OK_compressed-3.pdf (Accessed: April 5th, 2024).
- Harillo Gómez-Pastrana, R. (2023) 'Algunas consideraciones legales a tener en cuenta en los nuevos desarrollos de legislación espacial nacional (II),' *Observatorio Jurídico Aeroespacial*, Newsletter N^o 13, December 2023, pp. 22-25 [Online]. Available at: <https://aetae-aeroespacial.org/boletin-13-diciembre-2023/> (Accessed: April 5th, 2024).
- Harillo Gómez-Pastrana, R. (2023) 'Relaciones internacionales y las agencias espaciales: una muestra,' *Observatorio Jurídico Aeroespacial*, Newsletter N^o 11, June 2023, pp. 68-72 [Online]. Available at: <https://aetae-aeroespacial.org/boletin-11-junio-2023/> (Accessed: April 4th, 2024).
- Harillo Gómez-Pastrana, R. (2022) 'Algunas consideraciones legales a tener en cuenta en los nuevos desarrollos de legislación espacial nacional,' *Observatorio Jurídico Aeroespacial*, Newsletter N^o 8, October 2022, pp. 14-19 [Online]. Available at: <https://aetae-aeroespacial.org/boletin-8-octubre-2022/> (Accessed: April 5th, 2024).
- La Vanguardia (2023) *La Agencia Espacial Española ya tiene equipo directivo* [Online]. Available at: <https://www.lavanguardia.com/vida/20230621/9058072/agencia-espacial-espanola-equipo-directivo.html> (Accessed: September 28th, 2023).
- La Vanguardia (2015) *El Gobierno prepara una agencia espacial española que aúne las competencias* [Online]. Available at: <https://www.lavanguardia.com/vida/20150612/54432792403/el-gobierno-prepara-una-agencia-espacial-espanola-que-aune-las-competencias.html> (Accessed: December 16th, 2022).

- Martín, N. (2024) *El año uno de la Agencia Espacial Española: “En el espacio no hay paro, aquí falta gente”* [Online]. Available at: <https://www.elindependiente.com/futuro/2024/02/21/el-ano-uno-de-la-agencia-espacial-espanola-en-el-espacio-no-hay-paro-aqui-falta-gente/> (Accessed: April 5th, 2024).
- Mayence, J.-F. (2023) ‘A National Space Agency: what for?’, *Observatorio Jurídico Aeroespacial*, Newsletter N° 10, March 2023, pp. 8-12 [Online]. Available at: <https://aedae-aeroespacial.org/boletin-10-marzo-2023/> (Accessed: April 5th, 2024).
- Mayo Muñoz, L. (2014) ‘Cooperación internacional,’ *Cuadernos de estrategia*, 170, pp. 93-118 [Online]. Available at: https://www.ieee.es/Galerias/fichero/cuadernos/Cuaderno_Estrategia_170.pdf (Accessed: December 14th, 2022).
- Medina Castro, J. (2023) ‘La perspectiva administrativa del Estatuto de la Agencia Espacial Española,’ *Revista Española de Derecho Aeronáutico y Espacial*, 2023/3, pp. 351-369 [Online]. Available at: https://aedae-aeroespacial.org/wp-content/uploads/2024/01/R.E.D.A.E._2023_COLOR_OK_compressed-3.pdf (Accessed: April 5th, 2024).
- Moro Aguilar, R. (2021) ‘Necesidad de una legislación en materia espacial para el cumplimiento de nuestras obligaciones internacionales,’ *Observatorio Jurídico Aeroespacial*, Newsletter N° 4, December 2021, pp. 23-24 [Online]. Available at: <https://aedae-aeroespacial.org/wp-content/uploads/2022/01/Boletin-4.pdf> (Accessed: April 5th, 2024).
- Muñoz Rodríguez, M.-C. (2015) ‘Spain: Towards a National Space Legislation and a Spanish Space Agency?’, *Proceedings of the International Institute of Space Law*, 2015/58, pp. 587-599.
- Piris Cuiza, A. (2023) *Best practices and lessons learned from European space-faring nations in the development of a regulatory framework for activities in outer space in Spain* [Online]. Available at: <https://dl.iafastro.directory/event/IAC-2023/paper/79649/> (Accessed: April 5th, 2024).
- Pons Alcoy, J. A. (2022) ‘El proceso de creación de la Agencia Espacial Española cambia del paso lento al paso ligero,’ *Observatorio Jurídico Aeroespacial*, Newsletter N° 7, July 2022, pp. 9-13 [Online]. Available at: <https://aedae-aeroespacial.org/boletin-7-julio-2022/> (Accessed: December 14th, 2022).
- Pons Alcoy, J. A. (2022) ‘Demasiados “novios” cortejan la futura sede de la Agencia Espacial Española,’ *Observatorio Jurídico Aeroespacial*, Newsletter N° 8, October 2022, pp. 9-13 [Online]. Available at: <https://aedae-aeroespacial.org/boletin-8-octubre-2022/> (Accessed: April 5th, 2024).
- Pons Alcoy, J. A. (2021) ‘La OTAN incorpora el espacio ultraterrestre a su defensa,’ *Revista Española de Derecho Aeronáutico y Espacial*, 2021/1, pp. 251-254 [Online]. Available at: <https://aedae-aeroespacial.org/wp-content/uploads/2021/10/Revista-AEDAE-2021.pdf> (Accessed: April 5th, 2024).

- Sánchez Mayorga, J. (2021) 'Reflexiones para la creación de una agencia espacial española,' *Observatorio Jurídico Aeroespacial*, Newsletter Nº 2, July 2021, pp. 7-8 [Online]. Available at: <https://aedae-aeroespacial.org/wp-content/uploads/2021/08/BOLETIN-2-julio-OBSERVATORIO-JURIDICO-AEROESPACIAL-FINAL-28-JULIO.pdf> (Accessed: April 5th, 2024).
- Vernile, A. (2018) *The Rise of Private Actors in the Space Sector*. Cham: Springer; <https://doi.org/10.1007/978-3-319-73802-4>
- Zafra Riascos, M. (2017) 'Posible arquitectura de la Seguridad Aeroespacial Nacional,' *Cuadernos de estrategia*, 192, pp. 147-184 [Online]. Available at: https://www.ieee.es/Galerias/fichero/cuadernos/CE_192.pdf (Accessed: December 14th, 2022).