

The Lack of National Space Legislation in EU Member States and the Role of the EU as a New Responsible (?) Actor in Outer Space

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1. Introduction

While there is no doubt that all 27 EU member states are under an international obligation to ensure that non-governmental space activities under their jurisdiction are authorized and continuously supervised, only ten have so far enacted comprehensive national space laws. The existing laws follow a certain common pattern but still differ in certain aspects. This situation is likely to distort competition in the European internal market with its increasing number of non-governmental space actors operating in different countries. However, Article 189 of the Treaty on the Functioning of the European Union (TFEU), which describes the competence of the EU in the area of space, seems to prohibit the harmonization of national laws and regulations.

In addition, the EU itself is increasingly assuming the role of an important actor in outer space. In 2021, it has adopted a Regulation establishing the EU Space Programme and the EU Space Agency.¹ The paper will discuss the responsibility of the EU and its member states, in particular with respect to the obligation to authorize and supervise non-governmental space activities, and to register space objects.

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1 Regulation (EU) 2021/696 of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU, OJ L 170/69, 12.3.2021 (hereinafter Regulation 2021/696).

2. Use of the term *responsible*

The term *responsible* has various meanings in the context of outer space activities. On the one hand, it refers to the international responsibility of states and other subjects of international law, such as international organizations, for unlawful acts attributable to them.² On the other hand, the term is used in the context of initiatives aiming at *responsible behaviour* in outer space, namely that outer space should be used in a peaceful, safe, stable and sustainable manner, avoiding an arms race and remaining free from conflict, misunderstandings, and miscalculations.³ In this latter context it has a broader and more political meaning. This paper will use the term primarily in the former meaning, as a legal concept, but will argue that this is also relevant for the latter, the broader and more political meaning.

In international space law, as opposed to general international law, international responsibility covers also activities carried out by non-governmental entities and explicitly requires their authorization and continuous supervision. How this can work for international organizations and their responsibility is not entirely clear and represents a particular challenge for the EU as a new actor in outer space.

3. Responsibility and national space legislation of EU Member States

As is well known, Article VI Outer Space Treaty of 1967 (OST) stipulates that states are internationally responsible for national activities in outer space, whether they are carried out by governmental agencies or non-governmental entities, and that the latter need to be authorized and continuously supervised.⁴ The OST also contains provisions on the liability of

2 See the UN General Assembly Resolution 56/83, “Annex – International Responsibility of States for Internationally Wrongful Acts” of 12 December 2001; ILC Articles on the International Responsibility of State for Internationally Wrongful Acts, with Commentaries, ‘Report of the International Law Commission on the Work of its 53rd Session’ (23 April–1 June and 2 July–10 August 2001) UN Doc A/56/10 (ARSIWA); and the ILC Draft Articles on the Responsibility of International Organizations, UN Doc. A/66/10 (26 April - 3 June and 4 July - 12 August 2011) (DARIO); K. Boon, *New Directions in Responsibility: Assessing the International Law Commission's Draft Articles on the Responsibility of International Organizations*, Yale Journal of International Law 37 (2011) 3ff.

3 UN General Assembly Resolution 75/36 “Reducing space threats through norms, rules and principles of responsible behaviours” of 7 December 2020, UN Doc. A/RES/75/36; B. Unal, *Responsible Behaviour in Space Protect Everyone* (5 March 2021) <https://www.chathamhouse.org/2021/03/responsible-behaviour-outer-space-protects-everyone>.

4 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 of 27 January 1967, entered into force on 10 October 1967, 610 UNTS 205 (hereinafter OST).

the launching state(s) for damages caused by their space objects⁵ and the importance of registration of space objects.⁶

26 EU member states out of 27 have ratified the OST. The remaining states are bound by customary international law, which, for activities in outer space, is reflected in the *UN Declaration of Legal Principles in the Exploration and Use of Outer Space* of 1963.⁷ The principles of international responsibility, liability and registration, which are relevant in the present context, are contained in both documents.

In order to comply with their international obligations and to ensure safety and reliability of space activities EU member states have increasingly enacted national space laws. However, they have not done so in a harmonized way but rather on the basis of their specific national needs and priorities. It follows that the legal framework for space activities at the national level varies considerably in the different EU member states.

3.1. Diverse picture

Out of the 27 EU member states, only 10 have enacted dedicated and comprehensive national space laws, namely Austria,⁸ Belgium,⁹ Denmark,¹⁰ Finland,¹¹ France,¹² Greece,¹³ Luxembourg,¹⁴ The Netherlands,¹⁵ Portugal,¹⁶ and Sweden.¹⁷ While they have certain communalities, they differ in the designs of certain elements of the laws, which leads to a rather diverse picture.

A common feature in almost all of the laws is that operators of prospective space activities need authorization. This is of utmost importance for the states, which otherwise risk becoming liable for damage and responsible for possible violations of international law without even their knowledge of the

5 Article VII OST.

6 Articles VIII and XI OST.

7 Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, UN General Assembly Resolution 1962 (XVIII), 13 December 1963.

8 Federal Law on the Authorisation of Space Activities and the Establishment of a National Space Registry, 132/2011 (28 December 2011).

9 Law of 17 September 2005 on the Activities of Launching, Flight Operations or Guidance of Space Objects (revised by the Law of 1 December 2013).

10 Outer Space Act, 409/2016 (1 July 2016).

11 Act on Space Activities, 63/2018 (23 January 2018).

12 Law on Space Operations, 2008-518 (3 June 2008).

13 Authorization of Space Activities - Registration in the National Register of Space Objects - Establishment of a Greek Space Organization and other Provisions, 4508/2017 (22 December 2017).

14 Law on Space Activities (15 December 2020).

15 Law Incorporating Rules Concerning Space Activities and the Establishment of a Registry of Space Objects (24 January 2007).

16 National Space Act, 16/2019 (22 January 2019).

17 Act on Space Activities, 1982:963 (25 November 1982).

respective activity. Potential liability may be the most important motivation for states to enact national space legislation.¹⁸

Another commonality is public safety and reliability of the activity, which needs to be ensured. To this end, the qualification of the operator and technical tests or certificates are required. Beyond these common goals the motivations of states vary considerably. Even if the conditions for authorization may seem to be similar, their interpretation and implementation can be different.¹⁹

Other conditions are already different on their face. Some states prescribe compulsory insurance,²⁰ others decide on a case-by-case basis, or allow exceptions for certain space activities.²¹ Also, the right of recourse against the operator, if the state has paid compensation to victims, is regulated differently.²²

Supervision and control are also regulated very differently. The sanctions for violations of the space laws range from rather low fines²³ to very high fines and even imprisonment.²⁴

These different conditions under which national licences or permits are granted are connected to the different types of space activities the respective states are addressing and want to foster. Different ministries are competent for the implementation of the laws, such as those responsible for science and research, education, infrastructure, or for the economy.

The UN General Assembly Resolution *Recommendations on national legislation relevant to the peaceful exploration and use of outer space* of 2013²⁵ recognizes the different approaches taken by states in dealing with various aspects of national space activities. It accepts that states may adapt their national legal frameworks according to their specific needs and practical considerations and that national legal requirements depend to a high degree on the range of space activities conducted and the level of involvement of non-governmental entities. It follows that there is no “one size fits all solution”.

18 I. Marboe, National Space Law, in: F. von der Dunk (Ed.), *Handbook of Space Law* (Edward Elgar Publishing, Northampton:Cheltenham, 2015) p. 137.

19 *Ibid.*, pp. 127, 128.

20 *Ibid.* p. 147, for example, the Netherlands and France.

21 For example, Belgium provides for a facultative insurance and the amount is subject to a case-by-case evaluation pursuant to Art. 15.

22 For example under 11 (4) Austrian Outer Space Act, the right to recourse against the operator is possible if Austria has compensated the damage caused by a space activity.

23 Austria, France, and the Netherlands.

24 Belgium and Sweden.

25 *Recommendations on National Legislation relevant to the Peaceful Exploration and Use of Outer Space*, UN General Assembly Resolution 68/74, 12 December 2013.

However, member states of the EU may use the diversity to gain competitive advantages. They may aim at maintaining and strengthening the competitiveness of their respective industries and rather contribute to distortion rather than coherence of space activities in the EU.

3.2. Limits of coherence and harmonization in the EU

The Treaty of Lisbon, which introduced the competence of the EU in the area of space, provided some important conditions and limitations. Article 4 (3) TFEU stipulates that, in the area of space, the EU “shall have competence to carry out activities, in particular to define and implement programmes; however, the exercise of that competence shall not result in Member States being prevented from exercising theirs”. Member states thus keep their competences in the area of space and may develop different national space policies and legislation.

As an obstacle against harmonization of national laws commentators usually quote Article 189 (2) TFEU, which apparently excludes harmonizing the laws and regulations of the member states.²⁶ However, this may be an overstatement of what Article 189 (2) really says. The exclusion of harmonization needs to be interpreted in the context of paragraph 2 and Article 189 in its entirety.

First, paragraph 2 deals with “necessary measures, which may take the form of a European space programme” and makes clear that such measures must be established by “the European Parliament and the Council, acting in accordance with the ordinary legislative procedure.” The emphasis is on the procedure that the European Parliament and the Council need to adopt. The legal instrument chosen was, as discussed above, Regulation 2021/696, which shall provide a solid legal basis for the ambitious scope (also in financial terms) and the necessary institutions and proceedings (including the establishment of a new EU Space Agency) at the EU level.

Secondly, paragraph 2 refers to paragraph 1, which contains the objectives that should be attained. They are the promotion of “scientific and technical progress, industrial competitiveness and the implementation of its policies”. The EU may “promote joint initiatives, support research and technological development and coordinate the efforts needed for the exploration and exploitation of space”.

This shows that “coordination” of the policies and laws of member states is one of the goals of Article 189, which deals with the EU competence on space. In addition, the implementation of “its” (i.e. the EU’s other) policies also provides the basis for a more coherent legal framework for outer space activities in Europe. It follows that, with the exclusion of mandatory

26 F. von der Dunk, *European Space Law*, in: F. von der Dunk (Ed.), *Handbook of Space Law* (Edward Elgar Publishing, Northampton:Cheltenham, 2015) pp. 255-257.

harmonization – for example, by a dedicated Directive or Regulation – there is no obstacle against better coordination and more coherence in the area of space between EU member states.

4. Responsibility of the EU as a new actor in outer space

While the UN treaties on outer space emphasize the role of states in the exploration and use of outer space, they also include the possibility that international organizations are active in this field. As is well known, the treaties contain provisions explicitly addressing the responsibility of international organizations for their space activities,²⁷ the liability of international organizations for damage caused by their space objects,²⁸ and the obligation to register their space objects.²⁹

4.1. Is the EU an international organization from the perspective of international space law?

When the EU was founded by the Treaty of Maastricht of 1992, it only constituted an umbrella, under which the European Community and the Common Foreign and Security Policy were put.³⁰ The EU did not have a separate legal personality, which was evidenced, amongst others, by its lack of competence to conclude treaties. This changed substantially, when, at the Lisbon Conference, the Treaty on European Union (TEU) was signed, which explicitly states, in its Article 47, that the EU has legal personality.³¹ The TEU makes clear that the EU is established on the basis of two treaties, namely the TEU and the Treaty on the Functioning of the European Union (TFEU).³²

While there is no universally accepted definition of the exact conditions and criteria of an international organization, the formulation of the ILC in its Draft Articles on the Responsibility of International Organizations (DARIO) has considerable authority:

“For the purposes of the present draft articles,

(a) “international organization” means an organization established by a treaty or other instrument governed by international law and possessing its

²⁷ Article VI OST.

²⁸ Article XXII Convention on International Liability for Damage Caused by Space Objects of 29 March 1972, entered into force 1 September 1972, 961 UNTS 187 (hereinafter LIAB).

²⁹ Article VII, para 1, Convention on Registration of Objects Launched into Outer Space of 12 November 1974, entered into force 15 September 1976, 1023 UNTS 15 (hereinafter REG).

³⁰ C. Dadomo, *European Union Law* (3rd ed, Hall & Stott, London, 2020) pp. 7-9.

³¹ Article 47 Treaty on the European Union (Consolidated Version) of 7 February 1992, entered into force 1 November 1993 (hereinafter TEU) provides: “The Union shall have legal personality.”

³² See Article 1 TEU.

own international legal personality. International organizations may include as members, in addition to States, other entities;³³

These are quite persuasive indicators that the EU must be regarded as an international organization, in particular for the purpose of its international responsibility.

However, this conclusion is sometimes challenged by the argument that the EU is an international organization with particular characteristics, which requires special treatment. The concept of Regional Economic Integration Organization (REIO), whose member states have transferred competences over a range of matters, including the authority to make decisions binding on its member states in respect of those matters,³⁴ has appeared in the discussion. Such a REIO is able to become a party to an international treaty only on the basis of a special provision to this effect. The accession of the European Community to the Food and Agricultural Organization (FAO),³⁵ the Hague Conference on Private International Law,³⁶ and the Energy Charter Treaty (ECT),³⁷ before the Treaty of Lisbon, were based on such special provisions.

Nevertheless, the case is different with respect to the UN treaties on outer space. They do not foresee the possibility of international organizations becoming a party, but the LIAB and the REG provide that “international intergovernmental organizations” can declare their acceptance of the rights and obligations of the respective treaties.³⁸ While this term is not exactly the same as the term “international organizations” used in the OST, it is difficult to argue that the EU does not fall under the category of “international intergovernmental organizations”. During the drafting of Article XXII LIAB and Article VII REG the two terms were used interchangeably.³⁹

The EU is an organization established by a treaty, more precisely, by two treaties, the TEU and the TFEU. While the EU has reached a higher stage of integration amongst its member states and has more competences than other

33 Article 2 of the ILC Draft Articles on the Responsibility of International Organisations (DARIO), see above fn 1.

34 See Article II of the Constitution of the Food and Agricultural Organization (FAO) of 3 February 1947, 10 UNTS 208.

35 Ibid.

36 See the Council Decision of 5 October 2006 on the accession of the Community to the Hague Conference on Private International Law, OJ L297, 26 October 2006, pp. 1-14.

37 See Article II of the Energy Charter Treaty of 17 February 1994 entered into force 16 April 1998, 2080 UNTS 100.

38 Article XXII LIAB and Article VII REG.

39 See F. Tronchetti, L.J. Smith and A.Kerrest, Article XXII LIAB, in: S. Hobe et al (Eds.) Cologne Commentary on Space Law, Vol. II (Heymanns, Cologne, 2013) pp. 202-204; U. Bohlmann, Article VII REG, in: S. Hobe et al (Eds.) Cologne Commentary on Space Law, Vol. II (Heymanns, Cologne, 2013) pp. 310-311.

international organizations, this does not remove or alter the basis of its existence, which are two treaties, the TEU and the TFEU.

In particular, for the purpose of presenting itself as a *responsible* space actor, the EU cannot rely on a “REIO” exception in order to escape responsibility under international space law. The most obvious argument is that Article VI OST does not refer to “international intergovernmental organizations”, but to “international organizations”.

It follows from the above that the EU must be regarded as an international organization in the context of activities in outer space and that it is addressed by the UN treaties on outer space. For proving itself as a *responsible* space actor, the EU and its member states must recognize and comply with the obligations under international space law. A *responsible* actor in the broader sense would, furthermore, not confine itself to the legally required minimum but actively engage in various ways to ensure the safe and long-term use of outer space.

In the following, it will be discussed to what extent the legal framework in the EU and its member states already comply with the necessary prerequisites, where improvements are still needed, and where the EU aims or could aim to go beyond the legally required minimum.

4.2. The EU Space Programme

In 2021, the European Parliament and the Council adopted the Regulation establishing the Union Space Programme and the European Union Agency for the Space Programme (EUSPA).⁴⁰ The Regulation establishes the legal framework of the EU Space Programme, which mainly consists of five components, namely, (1) Galileo (global navigation satellites system under civil control), (2) the European Geostationary Navigation Overlay Service (EGNOS), (3) Copernicus (Earth observation system under civil control), (4) Space Situational Awareness (SSA) and (5) GOVSATCOM (satellite communication services for managing security critical missions and infrastructures). In addition, the Regulation aims at supporting an autonomous European access to space and at fostering the development of a strong space economy within the EU.⁴¹

The Regulation makes clear that the EU is willing to take on and strengthen its role as an actor in the area of space. It sets out the financial envelope for the EU Space Programme until 2027, namely EUR 14.88 billion (in current price).⁴² Furthermore, other EU programmes and funds, which share similar objectives, shall be used to pursue the objectives of the Space Programme,

40 Regulation (EU) 2021/696 of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU, OJ L 170/69, 12.3.2021 (hereinafter Regulation 2021/696).

41 Article 3 Regulation 2021/696.

42 Article 11 Regulation 2021/696.

including Horizon Europe, the InvestEU Programme, the European Defence Fund and the European Regional Development Fund.⁴³

The newly created EUSPA shall replace the former GNSS Agency, situated in Prague, Czechia. It will henceforth play a central role in the implementation and administration of the EU Space Programme. The Regulation determines organs, rules, procedures and principles for EUSPA, which it must apply in the exercise of its functions.⁴⁴ EUSPA will be a body of the EU with its own legal personality.⁴⁵ In each of the member states, the Agency shall have legal capacity accorded to legal persons under their national laws.⁴⁶

The EU's activities in outer space will therefore rest on two pillars: (1) EU activities administered by EUSPA, and (2) national activities administered by the member states, the latter ideally being designed in coherence with the EU's policy goals and legal framework. In the following it will be discussed, how these parameters fit the international legal framework for outer space activities.

4.3. Relation to international legal principles on outer space

The Regulation establishing the EU Space Programme explicitly refers to the international dimension of the exploration and use of outer space and states that the EU should take up an active role in the international discourse as a global player. The Commission is called, alongside the High Representative of the Union for Foreign Affairs and Security Policy ("the High Representative") and in close coordination with member states, to promote responsible behaviour in space when implementing the Programme including reducing space debris proliferation.⁴⁷ In order to be able to fulfill this task, the EU should ensure that it acts as a responsible space actor itself. The primary parameters in this context, as discussed above, are responsibility, liability and registration.

4.3.1. Responsibility

Responsibility under international space law requires authorization and supervision of non-governmental activities in outer space. While this can be ensured by national space legislation at the national level, it is more complicated at the EU level. Regulation 2021/696 provides a range of competences and functions for the newly created EUSPA, in particular its Administrative Board, which can be regarded as an appropriate administrative body to take this role.⁴⁸

43 Preamble, paragraph 15 of the Regulation 2021/696.

44 Articles 70-99 Regulation 2021/696.

45 Article 70 (1) Regulation 2021/696.

46 Article 70 (2) Regulation 2021/696.

47 Preamble, paragraph 14 of the Regulation 2021/696.

48 See Articles 73-77 Regulation 2021/696.

In particular with respect to the first “pillar” of the EU Space Programme, the five components (Galileo, EGNOS, Copernicus, SSA and GOVSATCOM), EUSPA will play a central role in implementation and administration. In principle, it can assume the position to oversee and ensure the EU’s responsibility in this regard. Nevertheless, the role of the member states remains important, both under international space law (Article VI OST) and under EU law (see the division of competences between the EU and its Member States under Articles 3 to 6 of the TFEU).

As regards the second “pillar” of the EU Space Programme, fostering the development of a strong space economy within the EU, national activities at the level of member states will continue to play a major role. The diversity of the legal framework for space activities at the national level will have to be addressed.

4.3.2. Liability

With respect to liability, Article 97 (3) of Regulation 2021/696 provides:

In the event of non-contractual liability, the Agency shall, in accordance with the general principles common to the laws of the Member States, make good any damage caused by its departments or by its servants in the performance of their duties.⁴⁹

While this explicit confirmation of liability for damage caused by EUSPA is remarkable, it differs from the liability rules under international space law. An interpretation of the “general principles common to the laws of the Member States” which could ensure compliance with international space law seems possible because all member states of the EU are bound by international space law and its strict liability regime. However, this would require an explicit deviation from the traditional interpretation and application of Article 340 TFEU,⁵⁰ which served as a model for Article 97 of the Regulation.

4.3.3. Registration

The EU shall be the owner of all tangible and intangible assets created or developed under the EU Space Programme’s components.⁵¹ While ownership of space assets is not the decisive criterion for rights and obligations under international law, the UN space treaties refer to “jurisdiction and control” over space objects, whose ownership is not changed by their presence in

⁴⁹ Article 97 (3) Regulation 2021/696.

⁵⁰ M. Kellerbauer, Article 340 TFEU, in: M. Kellerbauer, M. Klammert & J. Tomkin (Eds.), *The EU Treaties and the Charter of Fundamental Rights: A Commentary* (Oxford University Press, Oxford, 2019) pp. 2030ff.

⁵¹ Article 9 Regulation 2021/696.

space. In order to secure jurisdiction and control over a space object, the space object must be registered.

In practice, however, the satellites owned by the EU are not registered.⁵² Information on numerous Galileo satellites is available in the online index of space objects of the United Nations Office for Outer Space Affairs (UNOOSA), but it is based on other sources, not on registration documents submitted by the EU. The available information includes the international designator, the name of the space object, the state/organization, the date of launch, and in-orbit status. Such information is therefore publicly available, but not as a result of registration by the EU. The first Sentinel satellites launched for Copernicus, another flagship programme of the EU, have been registered by ESA.⁵³

This leads to uncertainty who has the right to exercise jurisdiction and control over these space objects. The EU must find a way to register its assets and to convey this information to the United Nations for entry in the online index and in the international registry of space objects maintained by UNOOSA.

5. Remaining challenges for the EU as a responsible actor in outer space

In view of these problems, it turns out that for ensuring that the EU acts as a *responsible* actor in outer space several steps still seem to be necessary. While not all relevant actors within the EU necessarily see the need for such steps, a number of experts, politicians and institutions have engaged in awareness raising. In particular, European Parliamentarians have launched several initiatives.⁵⁴ They have analysed the most urgent needs and identified the necessary next steps.

52 The EU has launched 24 out of 30 GALILEO satellites, but the UN registry indicates that they are all not yet registered: https://www.unoosa.org/oosa/osoindex/search-ng.jsp?lf_id=; see also A. Loukakis, EU as Owner of Galileo Satellites: Consequences for Registration and Liability, in: M. Hofmann (Ed.), *Ownership of Satellites* (Nomos, 2017) pp. 112ff.

53 Sentinel 1A, 1B, 2A, 2B, 3A, 3B, 5P are registered by ESA, but Sentinel 6, launched in 2020 in the US, is not yet registered.

54 See, for example, the initiative in the European Parliament in 2022; see <https://spacewatch.global/2022/02/european-space-legislation-proposed/>; see also the Plenary Session of the European Interparliamentary Space Conference (EISC) on “The development of national space laws” organized by the Norwegian Presidency in May 2021; https://eisc-europa.eu/images/stories/2021/Plenary/EISC_2021_-_Plenary_Session_proceedings.pdf.

5.1. EU needs to declare the acceptance of rights and obligations under the UN space treaties

In order to prove itself as a *responsible* space actor – both in the legal and in the political sense – the EU would need to declare its acceptance of the rights and obligations of the UN treaties on outer space. The example of other European organizations, such as ESA, EUMETSAT and EUTELSAT, shows that this is possible and useful. It has helped these organizations to gain reputation as responsible international organizations in the area of outer space activities.

Such a declaration would be legally and politically in the interest of the EU and its member states. It would remove doubts on jurisdiction and control over EU space objects, which may otherwise arise under Article VIII Outer Space Treaty. It would also ensure that space objects are recovered and returned to it upon return to Earth.⁵⁵

The EU has already made first steps in this direction. According to Regulation 2021/696, the Commission should “explore the possibility of the EU’s acceptance of the rights and obligations provided for in the relevant UN treaties and conventions and make, if necessary, appropriate proposals”.⁵⁶ However, as this request is currently only contained in the Preamble of the Regulation, the process is not mandatory and bears the risk of being delayed.

5.2. The EU can use its competences for reaching more coherence in the space sector

Due to the broad spectrum of space applications, the space sector does not remain isolated from other EU competences and policies.

Mindful of the distribution of competences between the Union and its member states in several of these policies, Regulation 2021/696 provides for coordination with member states and the use of Commission delegated act⁵⁷ with respect to the Programme’s security requirements. In addition, the Programme should be implemented in accordance with the objectives of the Directive of the European Parliament and of the Council on the re-use of public sector information,⁵⁸ in particular transparency, the creation of conditions conducive to the development of services, and contributing to economic growth and job creation. Furthermore, the Programme should make use of available in-situ and ancillary data provided by the member

55 Article 5 Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space 1967 of 19 December 1967, entered into force 3 December 1968, 672 UNTS 119.

56 Preamble, para 14 of the Regulation 2021/696.

57 In accordance with Regulation 182/2011.

58 Directive of the European Parliament and of the Council on the re-use of public sector information 2003/98/EC.

states in accordance with the INSPIRE Directive.⁵⁹ The EU Space Programme is therefore clearly integrated into other areas of EU activities in which the EU does not possess exclusive competence.

In policy areas where the EU has exclusive or shared competence, the prerequisites for authorization and supervision of space activities at the national level must include EU law and policy aspects. Member states need to comply with their obligations under EU law when exercising their function of authorization and supervision of national space activities.

It follows that EU member states will need to ensure that not only national but also European rules and interests are safeguarded, when non-governmental entities carry out space activities. Due to the division of competences between the EU and its member states the respective interests in various policy areas are closely intertwined.

As a consequence, it could be helpful for EU member states that do not yet have a national space law and have no or diverging practices of authorization and supervision to formulate principles and rules that need to be complied with in their authorization and supervision of national space activities. Such an instrument could leave room for specific national interests and requirements but ensure at the same time that European policies and rules are pursued. In addition, it can contribute to removing burdens and hurdles within the internal market, because it could help to minimise the risk that operators interested in the development of space activities face diverging rules in different EU member states. The starting point could be to ensure a minimum standard and define certain basic prerequisites for authorization which may be further developed by member states, if they so wish.⁶⁰ This could contribute to the provision of a level playing field for space operators throughout the Union and to the strengthening of the European space industry.

6. Conclusion

In order to become a *responsible* new space actor the EU needs to address a number of legal and political problems. The EU needs to find ways and means that space activities are carried out in compliance with international space law, primarily with the OST, the LIAB and the REG. This is particularly important with respect to activities carried out under the umbrella of the EU Space Programme, most prominently Galileo and

59 Directive of the European Parliament and of the Council establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) 2007/2/EC.

60 See, in this sense, Towards European Legislation for Space Activities. Status – Assessment – Action, Report to the European Parliament, <https://spacewatch.global/wp-content/uploads/2022/02/Towards-European-Legislation-for-Space-Activities-180222.pdf>.

Copernicus. With respect to activities carried out at the national level of EU member states, the lack of national space legislation in many member states is of concern. This aspect, however, rather pertains to the political meaning of the term *responsible*, because in the legal sense the EU is not responsible for national space activities of its member states. However, it may consider to take action to ensure that European and national space activities are carried out in a coherent legal framework. The EU needs to keep in mind the most fundamental obligations under international space law, such as liability and registration of space objects, before it can go beyond and request responsible behaviour in outer space in a broader sense. As long as there is uncertainty who has jurisdiction and control over objects launched into outer space and no clear identification of the liable entity in case of damage, as it is the case with the non-registered Galileo and Copernicus satellites, it will be hard for the EU to act as a credible promotor for the long-term sustainability of outer space in its relations with other space actors inside and outside Europe.