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Space for Actorness and Power:

The Discursive Construction of the European Union as a Space Actor and its Approach to Global Outer Space Governance



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Abstract

Space activity is rapidly developing, increasing globally in public and private sectors, and subject to competition amongst dominant spacefaring actors. Global space governance is discordant with the contemporary environment motivating international efforts to develop it. Since 2021 the European Union (EU) is intensively developing space policy and strategies. This dissertation contributes to studies on the construction and positioning of the EU as a global actor in relation to outer space. It examines how the internal discursive construction of the EU as a space actor and power-considerations shape its approach to global space governance using a social constructivist approach with critical discourse analysis of official internal documents in a longitudinal case study from 2009-2023. Space promotes actorness and power for the EU as global actorness and internal objectives are understood as mutually reinforcing. The dissertation demonstrates how through perception of the domain as congested and competitive capability expansion is linked to security and global context which shapes the EU's approach to global space governance and sustains dynamics of power projection and competition in the domain, revealing geopolitical notions. Nonetheless, findings indicate that by virtue of presence global organising principles may be shaped to facilitate international cooperation in space.

Keywords: European Union; Outer Space; Actorness; Power; Global Governance

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List of Abbreviations

ARA	Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (Astronaut Rescue Agreement)
ASAT	Anti-satellite
CEOS	Committee on Earth Observation Satellites
CFSP	Common Foreign and Security Policy
CSG	Centre Spatial Guyanais (Guiana Space Centre)
EEAS	European External Action Service
ESA	European Space Agency
EUSPA	European Union Agency for the Space Programme
GEOSS	Group on Earth Observation System of Systems
GMES	Global Monitoring for Environment and Security
ISECG	International Space Exploration Coordination Group
ISS	International Space Station
LC	Convention on International Liability for Damage Caused by Space Objects (Liability Convention)
MA	Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Agreement)
MS	Member States
NASA	National Aeronautics and Space Administration (USA)
OST	Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty)
RC	Convention on Registration of Objects Launched into Outer Space (Registration Convention)
SST	Space Surveillance and Tracking
STM	Space Traffic Management
UNCOPUOS	UN Committee on the Peaceful Uses of Outer Space
UNGA	UN General Assembly
UNOOSA	UN Office for Outer Space Affairs

Glossary

ASAT testing: Tests targeted at the disruption or incapacitation of satellites, often through their physical destruction using Earth-based capabilities, causing space debris.

Global Monitoring for Environment and Security: The collection and dissemination of information concerning the environment and security obtained by monitoring the Earth from space, land, air, and sea. The dissertation addresses the space-component.

Launchers: Vehicles used to carry spacecraft such as satellites or vehicles designed for travel or operation outside Earth's atmosphere (manned and unmanned), into outer space as well as systems utilised for their operation during various stages. Currently rockets are the only way to launch spacecraft but theoretical concepts for non-rocket space launch are being developed.

NewSpace: A global trend of private companies and start-ups developing new space technologies and applications that are often more cost-effective with a shorter lifespan compared to contemporary dominant technologies, largely driven by commercial motivations. This is at times also referred to as 'Space 4.0', particularly within the ESA framework.

Space Assets: Spacecraft, Earth-based supporting infrastructure, launchers, and space-based technological systems including imaging and communication.

Space Capabilities: Space-based and space-related infrastructure, systems, and services including access to and use of these, as well as to access and use of space-based resources such as orbital and frequency slots, and natural resources.

Space Debris: Man-made nonfunctional objects (e.g. fragments of rockets or inactive satellites) in outer space orbiting Earth.

Spacescape: The landscape of drivers and implementors for space activity, policy, initiatives, and programmes at various levels of analysis.

Space Surveillance and Tracking: Identification and monitoring of space objects using Earth- and space-based sensors including processing capabilities to provide data, information, and services related to space objects.

Space Traffic Management: Means and rules pertaining to access to, conduct of activities in, and return from outer space in a sustainable and safe manner.

1. Research Premise: The EU and Outer Space

The 21st century is marked by substantial expansion of space activity and regulation, both at national and international levels. The European Union (EU) is no exception and is actively expanding its actorness in outer space with substantial growth of EU space initiatives in recent years. Although developed later than others, it is nowadays acknowledged as a relevant space actor that possesses advanced space assets (Lieberman et al., 2023:4). Simultaneously, the Union is undergoing a “geopolitical awakening” that requires it to “learn to speak the language of power” (Borrell, 2022). As a domain of strategic importance, space is increasingly subject to dynamics of power competition, but global governance frameworks are not fit for the contemporary context or ambiguous (Pečujlić, 2023:20-27). As such, space is markedly increasing in relevance for the construction and positioning of the EU as a global actor, not only within the domain but also in the context of multilateral global order (e.g. Michel, 2021).

At the 2019 annual conference on European space policy the then-internal market Commissioner noted the need for a grand space project attractive to European citizens, such as the USA’s vision of Mars or China and the moon (Posaner and Saeed, 2019). Research has identified that the EU addresses space from a political and instrumental perspective advancing integration as well as security and economic policy (Hoerber and Stephenson, 2016; Brandenburg, 2023), which also contributes to development of European identity (Venet and Baranes, 2013). This is developing in tandem with expanding security considerations (Hoerber and Oikonomou, 2023). Recent EU discourse on outer space has shifted from environmental, scientific, and economic focus to security and defence (Klimburg-Witjes, 2021). The 2023 Space Strategy for Security and Defence is the EU’s first incorporation of hard power in the domain (González Muñoz and Portela, 2023:8). Studies indicate the EU is building capacity to become a relevant actor in global space governance but identify unrealised potential to shape future space law and governance (Béclard, 2013; Pavesi and Wouters, 2023). This suggests interplay of internal policies and external engagement (ibid.:1211; Schunz and Damro, 2020; Chatzopoulou and Ansel, 2023), which this dissertation seeks to address in relating internal EU discourse to its international relations by employing critical discourse analysis from a social constructivist perspective to address the research question *how does the internal discursive construction of the European Union as a space actor shape its approach to global space governance and how does this incorporate power-considerations?*

1.1 Treaty-Basis as the Starting Point

The dissertation uses the EU's treaty-basis as a starting point of enquiry, as well as to inform its understanding of European identity. Although the EU does not have a constitution *per se*, the Treaty on European Union (TEU), Treaty on the Functioning of the EU (TFEU), and the EU's Charter of Fundamental Rights establish a constitutional charter (Court of Justice of the EU, 1991:para.21). Mention of constitutional law or principles in the dissertation refers to these. Based on the principles of subsidiarity and conferral, the EU's actions must accord with legal bases provided by the treaties (Art.5 TEU). As the EU is a polity of conferred powers, this is of constitutional significance (Larik, 2023:1133-1134). Under the principle of conferral, the EU must act within the limits of the competences conferred upon it to attain objectives set out in the constitutional charter. Under the principle of subsidiarity, the EU may act in areas which do not fall within exclusive competence if objectives cannot be achieved by Member States (MS) or are better achieved at EU-level.

Title I TFEU defines the competences conferred on the EU. Only those relevant for the dissertation are listed here. Exclusive competence applies to the customs union; competition rules necessary for functioning of the internal market; common commercial policy; and conclusion of international agreements when provided for in a legislative act or required to enable exercise of internal competence (Art.3 TFEU). Shared competence addresses the internal market; social policy; economic, social and territorial cohesion; environment; transport; trans-European networks; freedom, security and justice (Art.4 TFEU). The EU may further support, coordinate, or supplement MS' actions (Art.6 TFEU). Common foreign and security policy (CFSP) is governed by Title V TEU. It is driven by the European Council and Council of the European Union, hereafter referred to as the Council (Art.26 TEU).

The EU's approach to global affairs is set by Article 21(1) TEU which maintains its action "shall be guided by the principles which have inspired its own creation [...] which it seeks to advance in the wider world": Democracy; rule of law; human rights and social solidarity; and principles of international law including the United Nations (UN) Charter. Article 21(2) TEU outlines the Union's objectives in promoting "an international system based on stronger multilateral cooperation and good global governance": Safeguarding its values, fundamental interests, security, independence, and integrity; promoting democracy, human rights, rule of law and principles of international law; preserving peace, preventing conflict and strengthening international security; fostering development; encouraging integration in world economy;

sustainable management of global natural resources and improving environmental quality; and humanitarian aid.

The constitutional charter provides moral, political, and legal impetus to engage with global governance from an approach that emphasises the UN framework and multilateral cooperation (van Vooren et al., 2013:1-3; Larik, 2023:1138). Due to this, the dissertation focuses on the EU's approach to global space governance. Outer space was constitutionally incorporated with the 2009 Lisbon treaty. Article 189(2) and Article 4(3) TFEU establish parallel competence for space policy following the ordinary legislative procedure which excludes harmonisation of MS law and requires exercise of the EU's competence to not prevent MS from exercising theirs. Unlike shared competence, parallel competence does not prevent MS from adopting legislation when the Union has exercised its competence, thus areas within it are not either a Union or a MS competence (Schütze, 2020:79-80). Article 189(1) TFEU determines the Union's objectives in outer space to promote scientific and technical progress; industrial competitiveness; and implementation of EU policies by supporting research and technological development; promoting joint initiatives and coordinating efforts on exploration and exploitation of space. These principles and objectives create binding norms of constitutional law, guiding the EU's policy formulation and implementation (Larik, 2023:1132).

1.2 Outer Space Governance

The Outer Space Treaty proclaims space as a province for all humankind (Art.I), establishing space as global commons. These are areas and common pool resources beyond sovereign jurisdiction that are open to access. Governance of commons is facilitated by international law, establishing a framework of rules that ensures collective agreement on standards of appropriate behaviour (Vogler, 2012:68-69). There is no universally accepted formal boundary between outer space and Earth's atmosphere (de Oliveira, 2015:5-30). At the height where aerodynamic lift yields to centrifugal force, the von Kármán line is considered the boundary between airspace and outer space by most legal doctrine and official bodies at 83-100km above sea level (Becerra et al., 2023:80). The dissertation refers to this delimitation when addressing 'outer space' or 'space' as a broad term without distinction between types of orbits (see ESA, 2020).

Outer space is governed by five international treaties and non-binding principles stemming from the UN framework: 1967 Outer Space Treaty (OST), 1968 Astronaut Rescue Agreement (ARA), 1972 Liability Convention (LC), 1974 Registration Convention (RC), 1979 Moon Agreement (MA). The UN Committee on the Peaceful Uses of Outer Space (UNCOPUOS)

develops space law and oversees implementation of the treaties, whilst the UN Office for Outer Space Affairs (UNOOSA) is tasked with implementing UN General Assembly (UNGA) and UNCOPUOS decisions and administering register of objects launched into outer space. When discussing global space governance, the dissertation refers to these as the macro-level although space governance encompasses various instruments, institutions, and mechanisms and extends to regional and national legislation (Jakhu and Pelton, 2017:7). Key aspects of space law in the UN framework are briefly outlined here and elaborated in the analysis when relevant.

General international law and the UN Charter apply in space. Voluntary guidelines concern limiting long-term presence of spacecraft in low Earth orbit, limiting space debris and probability of collision in orbit, and refraining from direct-ascent anti-satellite (ASAT) tests. The core norm of space law is peaceful use of outer space (Art.II OST) which extends to prevention of harmful interference with space activities and the environment. Use of space should benefit all humankind (Art.I OST), establishing global common interest. To this end particular consideration is paid to assisting developing countries, international cooperation, and obligation to report potential dangers. National appropriation of space or celestial bodies is prohibited, and weapons of mass destruction banned (Art.IV OST). Other norms address freedom of exploration (OST); assistance for astronauts (ARA); liability for collision or damage (LC); and transparency such as registration of objects launched into space (RC).

Outer space is crucial in security and military operations for navigation, communication, and intelligence-gathering, as well as maintaining the functioning of everyday-life, much of which relies on satellite activity (Cayón and Yousefian, 2021:106). Competitive dynamics characterise the domain through actors' pursuit of economic and military interest and power competition described as a new space-race (Pekkanen, 2019). Based on the domain's status as commons, technological and financial requirements to access and benefit from space, as well as the benefit of a peaceful environment, there is also much cooperation in upholding common interest (Davis Cross, 2019). Due to this duality, effective global governance is required to ensure individual actors do not override global public interest.

Yet space law has been in a state of stalemate for over 40 years (Pečujlić, 2023). Opposing positions are entrenched amongst key actors based on incompatible national interests and ideas on the use of space (Pellegrino and Stang, 2016:54-55,65-66). Existing institutions were not created to govern the contemporary context. Treaties were adopted during the 20th century space-race in a bipolar global context but nowadays an increasing number of actors and

stakeholders including non-state-actors participate in space activities that are increasingly commercialized. Increased activity has resulted in exponential growth of objects in space which is problematic due to collision risks as well as availability of orbital slots for satellites. The UN has been unsuccessful thus far in negotiating new treaties; instead, norms of global governance have arisen on a voluntary basis, but these are at times contested or competing (Jakhu and Pelton, 2017:19-20).

This premise gives rise to the research question's linkage between internal policy and international relations, as well as its focus on global space governance and power-considerations. To engage these, the dissertation first outlines its theoretical approach emphasising social construction; its conceptualisation of the EU as an actor and of power; and how actors may engage global governance. The research design builds on the theoretical approach outlining the scope of the dissertation and its understanding of discourse. This is followed by the analytical framework which elaborates how research is conducted using discourse analysis as well as how findings presented in the dissertation are attained. In sections 5 and 6 analytical findings in response to the research question are presented and discussed. These sections elaborate how through the understanding of global actorness and internal objectives as mutually reinforcing the EU uses space to expand actorness and power by linking space to security and external context. The internal construction of the EU as a space actor and global context thereby shape its approach to global outer space governance, sustaining dynamics of power projection and competition within the domain. Finally, the conclusion reflects upon the process of developing and executing these components.

2. Theory: Explaining and Understanding Social Construction

The dissertation uses the EU's treaty basis outlined in section 1 as a starting point of enquiry with the theoretical approach building on this premise to include power-considerations. The theoretical approach stems from social constructivism, used in International Relations (IR) and European integration. It is considered a middle ground not limited by an exclusive pole mentality between positivism or rationalism and interpretivism, blending understanding and explaining (Risse and Wiener, 1999).

This section outlines the dissertation's theoretical approach to the research question by elaborating ontology and epistemology, followed by its conceptualisation of the EU as a global actor and power. Thereafter it presents how multilateral global order and engagement therewith is understood. Together these sections provide the basis for examining how the internal discursive construction of the EU shapes its approach to global governance and how this incorporates power-considerations. Discursive construction is elaborated upon in section 3 as this not only forms part of the dissertation's theoretical approach but determines its research design.

2.1 Intersubjective Understandings, Structure and Agency

Constructivist ontology views the world as intersubjectively constructed. Although reality is socially constructed, material reality exists. Intersubjectivity appertains to collective understandings or ideas that are institutionalized through social practices and drive action. Actors' identities and preferences are shaped by collective understandings of themselves, the world, and how it works, but can in turn affect how the world is understood (Adler, 1997:323-324). Identity is therefore defined in reference to intersubjective understandings such as norms, meanings, or beliefs (Klotz and Lynch, 2007:7-8).

Through systematic study and researcher reflexivity, pragmatic claims can be made on the extent to which the world is socially constructed and how this works (Parsons, 2010:81,90-91; Dessler, 1999). The premise of intersubjectivity purports that structures and agents are co-constitutive. Collective understandings are institutionalized in social practices and have structural characteristics because as drivers of social action they establish limits of what is possible for actors. Social practices are the result of inter-action among actors who act based on their understandings of the world and how it works (Adler, 1997:325).

Norms emerge from inter-action and understandings of actors in particular communities and in turn shape actors' behaviour and beliefs being constitutive of identities and preferences relational to actors' social context (Klotz et al., 1999:54). They are single standards of ideas or expectations about appropriate behaviour for actors with a particular identity, whilst institutions are relatively stable aggregations thereof that form practices and rules defining appropriate behaviour for groups of actors (Finnemore and Sikkink, 1998:891). EU bodies and *acquis communautaire* are considered institutions in this sociological sense.

Structures are defined by shared understandings, expectations, and practises as well as material resources. Intersubjectivity determines what meaning actors attribute to material resources, thus they are not explanatory without social action (Wendt, 2006:111-113). Ideas operate within material contexts such as distribution of certain capabilities but are not reducible to determinant material factors (Sørensen, 2008; Hay, 2002:208). Outer space illustrates the relevance of this. Without financial and technological capability, it is inaccessible. Actors without these rely on others to assist them e.g. launching a satellite using others' spaceport facilities, which depends on their relationship and established practises. This draws attention to relational manifestations of material and ideational properties which affect an actor's capability (Meyer and Strickmann, 2011:69-70).

International actors' identities and preferences do not simply engage the international sphere as pre-given, exclusively determined by internal factors, but are in part shaped by international structures (Wendt, 2006:248). Understandings or ideas determine actor's perceptions of their preferences. Actors' preferences are formed in a sense-making process, shaped by institutional, organizational, international, national, and local influences as well as material contexts. They can engage in strategic calculation but lack complete information, interpreting their world to establish an understanding of their context (Hay, 2002:209-211). Ideas mediate between the environment and actors; norms guide how actors form preferences and justify their existence, behaviour, and experiences (Kratowil and Ruggie, 1986:767-769).

2.2 Actorness, Normative Identity, and Power-Considerations

The EU is a polity in which MS have pooled powers that at times operates parallel to MS. The interaction of external and internal inputs constructs actorness (Bretherton and Vogler, 2002:236). As such it is not just a non-traditional actor but subject to internal structural dynamics and agency of actors within. The EU's international relations are multi-faceted, incorporating CFSP, external action and external dimensions of internal policies, and

corresponding methods of decision-making and policy development within the EU (Gstöhl and Schunz, 2022:1-3). This affects the Union's actorness in different policy areas. Nonetheless, an actor-centred approach can still be used to analyse it, bearing in mind it is influenced by inputs from internal actors and their preferences as well as external sources which affects international actions and positions (Carta and Morin, 2014:10).

This does not deny the development of a European supranational or international identity. The EU is based on a liberal collective identity through belief in and adherence to democratic rights and values as fundamental beliefs and practices, as outlined in section 1. Internally, the principles of rule of law, democracy, pluralism, and open market economy are derived from and justified by these, shaping preferences. Externally, rule-based world order is characterized by democracy, multilateralism, pacifism, and support for a global free market economy (Schimmelfennig, 2001:58-59). EU bodies and *acquis communautaire* promote its identity development and actor quality on the EU-level by enabling it to act as a unified actor on the international stage and be engaged as such by its institutions, MS, other international actors, and research. The dissertation engages the EU in these terms as well. The EU's normative treaty-basis for its international relations (section 1.1) is well-established in European Studies. This is extensively researched and as it falls beyond the scope of the dissertation need not be addressed further (e.g. Manners and Whitman 2003).

Nonetheless, EU discourses incorporate an increasingly interest- and power-based approach to global affairs. This is observable in the 2016 Global Strategy which considers dynamics of global power politics (Barbé and Morillas, 2019) and the 2019 formation of a geopolitical Commission (Haroche, 2023). Therefore, the dissertation does not enquire if or to what extent the EU's approach to space governance incorporates power-considerations but assumes that these are incorporated and examines how this shapes the approach. An attempt at reconciliation of a power- and interest-based stance with a norm-driven policy based on international law is observable in the Union's contemporary approach to global affairs, shaping its international strategies (Gstöhl and Larik, 2023:1109). Such an approach becomes particularly intriguing in the context of outer space, where power and interest dynamics and normative ideas of common global interest intersect.

2.2.1 The EU as a Global Actor

The EU is a growing space actor with international identity shaped by norms and preferences (Venet, 2013) including in its approach to space governance (Mutschler and Venet, 2012).

Actorness requires shared commitment to overarching values and principles, addressed in section 1; internal legitimation of external policy priorities, addressed in section 3.3; ability to negotiate effectively with actors in the international system, addressed in section 4; ability to identify policy priorities and formulate coherent policies; and availability and capacity to use policy instruments. Contributory factors to EU-actorness are presence, opportunity, and capability (Bretherton and Vogler, 2002). These depend on but also affect autonomy from its external environment and internal constituents (ibid.:20). In the domain of space material conditions are particularly significant for autonomy and affect presence, opportunity, and capability. The research design addresses these factors to examine how official discourse constructs the EU as a space actor. Based on the principle of conferral formal qualities of actorness may be linked to Article 189 TFEU, therefore the discourse analysis prioritises examination of *how* discourse constructs the EU as an actor and its approach to space governance and how this incorporates power-considerations over formal tasks and responsibilities allocated to EU bodies.

Presence addresses an actor's ability to exert influence beyond its borders by virtue of existence, shaping perceptions, expectations, and behaviour of others. Presence is enhanced by success in maintaining security, prosperity, effectiveness, purpose, and unity, which makes EU values and norms or institutional frameworks attractive to others. It thus concerns the EU's fundamental nature or identity and its internal priorities as well as external perceptions thereof (Bretherton and Vogler, 2013:376-378). The research design does not incorporate external perceptions but addresses the fundamental nature of the EU in its approach to space governance. It must therefore be stressed that the dissertation establishes the endogenous side of actorness on the supranational level. Due to technical requirements of accessing space, presence is additionally conceptualized as the existence or occurrence of EU activity in or relating to outer space.

Opportunity considers the external context of ideas and events that enable or constrain actorness in terms of action and influence. This relates to the EU's ability to defend its preferences and those of MS (ibid.:378-381). As an actor, the EU incorporates preference-promotion and power-considerations in its pursuit of foreign policy objectives and constitutional principles (Youngs, 2004; Holden, 2009; Simón, 2012). Opportunity is linked to perceptions of the international system and its operation which affects how events are interpreted. For instance, ideas of economic dependence or globalisation may present an opportunity for the EU to enhance actorness due to a shared understanding of state inadequacy

in regulating international economic actors' activities (Bretherton and Vogler, 2002:7). External context in outer space includes the stability of the space law regime and the dual nature of the domain as competition alongside cooperation.

Capability addresses the internal dimension of the Union. It relates to ability to develop and formulate priorities and policies, as well as availability of and capacity to employ policy instruments. According to the outline above of the EU as a polity and in consideration of competence-distribution, this can constrain or enable action, affecting exploitation of presence or response to opportunity. Instruments employed in pursuit of external policy objectives are economic, including trade instruments like sanctions or incentives; political, such as diplomacy; or military activity (Bretherton and Vogler, 2013:381,385).

Crucial to the EU's actorness is convergence between MS' and EU bodies' preferences. Alignment of preferences concerns norms and interests, attained through persuasion, socialisation, and issue linkage (Carbone, 2013:342-343). As a parallel competence EU space policy concerns supranational and national levels. The dissertation addresses the supranational level in the interest of establishing the discursive construction of the EU as a space actor and to address the implied requirement of active engagement with governance in the treaties. This brackets development of agreement among MS and EU bodies, relating to coherence. The Union has produced a collection of space-related policies, therefore assuming some level of agreement is permissible.

2.2.2 Power as Capacity to Control One's Fate

Actorness refers to capacity to act in the international system, requiring power to do or power over something. The dissertation does not define what kind of power the EU is or has, but rather explores if and how official documents incorporate power-considerations in constructing the EU as a space actor and how this informs its approach to space governance. The constitutive principles provide justification and legitimacy for the EU's power aspirations in global affairs (Aggestam, 2012:457). Power is understood as the production of effects on actors in different ways, shaping their capacity to control their fate – actors have power over someone or something and power to act a certain way (Barnett and Duval, 2005:43-46). Autonomy as an actor is thus related to power.

Power can take multiple forms in international affairs. It can work through actors' inter-action shaping their capacity to control their fate, affecting their behaviour or self-understandings,

thus producing effects on behaviour and identities. The dissertation addresses various forms of power; located in international institutions, operating diffusively through inter-action and directly through mutually constitutive relations or producing compulsory effects on others (ibid.:48,69). As it is not possible for the dissertation's analytical scope to include all power relations and manifestations, the conceptualization outlined here addresses the purview of the research enquiry (Hay, 2002:168-169).

Compulsory power incorporates the concept of hard power as material resources to control others' behaviour and circumstances, relating to great powers as actors who have capacity to deploy resources to overcome preferences of others through strategies such as coercion. It also operates normatively, through shaming or invocation of legal norms. Compulsory power further incorporates positions of authority as a resource to control (Barnett and Duval, 2005:49-50). Authority can also refer to the ability to determine shared meanings which implies ability to shape rules, i.e. what is considered appropriate behaviour (Adler, 1997:336-337). Structural power contributes to determining actors' capacities, interests, and self-understandings, effected through intersubjective practises. Institutional power works through diffuse relations through actors' relationships to institutional arrangements; their actions can exercise power (to control their fate in collective outcomes but also over others) through these. Institutional arrangements limit range of actions for actors. Therefore, institutional rules may support influence in shaping collective outcomes (Barnett and Duval, 2005:51-53).

Space power addresses the capacity-dimension of power as an actor's technological capabilities, assets, launch and space-based service autonomy but also refers to status as an actor capable of conducting space activities autonomously (Aliberti et al., 2019:7-8,11,15). It is therefore not distinct from forms of power addressed above but incorporates political will in exercising capacity to control one's fate that is developed through space strategies and policies, which enables actors to develop and exert power internationally. Due to the significance of space for security and autonomy or conversely control, as well as economic growth and institutional cooperation, power on Earth is linked to power in space. Therefore, the domain is susceptible to transfer of terrestrial power competition or geopoliticisation. This indicates an inherently performative aspect to outer space (Al-Rodhan, 2012:211-212). Actors may seek to demonstrate capacity to project power, deter others from exercising theirs, or construct a specific perception of themselves.

Due to the nature of space as a domain characterised by both competition and cooperation that is rapidly evolving alongside technological development and requires substantial financial and technological capability, as well as the absence of clear rules and enforcement mechanisms, there is a high degree of uncertainty in policymaking. Simultaneously, space is intersectoral. It is crucial to security, international power, and global order as well as economic growth as most functions vital for modern society are connected to it, but also has effects in the social and environmental sectors as well as knowledge-production and innovation, at global, EU, national, local and individual level (Pavesi and Wouters, 2023:1201). The construction and projection of the EU as a space actor is therefore significant as it may influence behaviour and structure MS' and other actors' expectations and behaviour, affecting the current and future positioning and agency of the EU in global politics (Delphin, 2021:45) as well as international structures. This is particularly relevant when considering the interplay between an actor's construction and structural conditions i.e. global order.

2.3 Multilateral Global Order

From a constructivist perspective multilateral global order is facilitated by international law which sets standards for legitimacy and appropriate behaviour (Klabbers, 2013:16). UN treaties are a core component thereof, which applies not only to state but also non-state actors such as organizations (Fitzmaurice, 2019:493-507). In addition to written law, state-actors are bound by customary international law which stems from deeply engrained social practices based on *opinio juris*; legal obligation to follow norms and common practice. As there is less space interaction than in other environments, space law develops with fewer instances of practice, hence it is suggested instant custom may develop in the domain. Development of customary space law is determined by actors who are active in outer space as those whose interests are particularly affected by a customary rule engage in its creation (Klabbers, 2013:27-28; Jakhu and Freeland, 2016).

Shared ideas, expectations, and beliefs about appropriate behaviour give the international sphere order, structure, and stability, forming an international system. Norms channel, regulate, and can limit the range of actions, thereby constraining actors who comply with norms that link to their identities as members of this system. They become accepted by international actors through socialisation processes which combine persuasion, pressure for conformity as well as enhancing international legitimation and self-esteem. Norms are institutionalized in sets of

international rules such as space law through organizational platforms like UNCOPUOS (Finnemore and Sikkink, 1998: 902-903,899-900).

Norms may be formally institutionalized and shared by all actors becoming a prominent feature of discourses, but this does not automatically imply they are internalized (Jepperson et al. 1996:54). International actors do not always conform to standards of appropriate behaviour or accept these as a normative imperative for preferences and behaviour. They can consider it an external institutional resource or constraint that affects their inter-action (Schimmelfennig, 2001:62-64). Internalization occurs when norms are so taken for granted that conformance is automatic, actors do not consider or discuss it (Finnemore and Sikkink, 1998:904). Norms can be employed strategically by actors in consideration of material and strategic self-interest but can also be internalised, shaping preference (Wiener, 2003).

The dissertation therefore assumes that while structure and agency are co-constitutive, the extent of this can differ as rules and practices are intersubjectively constructed. Norms can be external to actors as part of their social context and are therefore potentially manipulable by actors who can reason about them from an external standpoint within their respective normative structure (Hoffmann, 2010:7-8). From this theoretical approach discourse analysis permits insight into features of the EU's approach to space governance, further elaborated in section 4.1-4.2. Whilst the research focuses on power-considerations, the starting point of enquiry in the constitutional charter ensures that analysis remains attentive to normative dimensions of the EU's space actorness.

2.4 Commons Governance and Strategic Social Construction

The von Kármán line has become accepted in wide-held belief as the delimitation for outer space despite lacking scientific or legal justification (Gangale, 2018:430). This shows how the understanding of global commons is socially constructed; they can be arenas of political contestation and sites of inter-action (Vogler, 2012), with even the status of space as commons being challenged by space actors' national legislation and policy, e.g. USA (Cayón and Yousefian, 2021:106-107). How use of space for common benefit is to be achieved is open to interpretation, as is use of space for peaceful purposes. 'Peaceful purposes' could refer to exclusively non-military or non-aggressive purposes. The latter is the dominant understanding based on development of space activity (Jakhu and Pelton, 2017:23,267-271). The domain is of relevance for strategy and security with communication and imaging technologies often serving both military and civilian purposes, referred to as dual-use (Naja and Mathieu,

2015:376-379). This shows how understandings can inform an actor's approach to the domain, which is supported by perception of inter-action dynamics in space as competitive or cooperative.

Based on the characteristics of the domain outlined here and in section 1.2, an understanding of space as contested, competitive, and congested has become established (Harrison, 2013). The EU considers outer space an increasingly contested domain and space assets strategic enablers for security and defence (Council of the EU, 2022). The EU's approach to commons is expressed in its "interest in [...] sustainable access to the global commons" (EEAS, 2016:15). Despite open access to commons, it is unevenly distributed. Access to space requires technological and financial capabilities; actors that possess these can benefit from exploitation. Governance of commons may not be engaged exclusively based on global common interest; their control or exploitation can provide strategic, political, or economic advantages. Further, as international governance regimes are established through principles, norms, and rules that influence expectations of appropriate behaviour (Krasner, 1983 in Gstöhl and Larik, 2023:1113), the ability to shape rules, i.e. what behaviour is considered appropriate, is significant.

This points to considerations of power as conceptualized in section 2.2.2, particularly in capability to shape international institutions to advance or preserve preferences and advantageous positions (Barnett and Duvall, 2005:58-59). Actors can strategically engage in intersubjective construction to advance preferences which may result in uneven influence in shaping collective understandings or outcomes. This links understandings to global space governance (Sadeh, 2015:37; Pavesi and Wouters, 2023:1204). The constructivist perspective of EU foreign policy emphasises diffusion, transforming understandings and identities of other polities by shaping norms and values that inform their actions. The EU thus pursues the objective of influencing how organising principles, institutions and norms, i.e. international structures, are understood (Keukeleire and Delreux, 2022:353-354). The dissertation considers this strategic social construction.

2.4.1 Organising Principles and Geopolitics

For the EU a multilateral system is a "strategic interest [...] in its own right" (JOIN(2021) 3:6). EU international relations tend to externalise practises that have developed internally; the Union seeks to project its norms and rules in international preference-pursuit (de Búrca, 2013).

Diffusion refers to projecting EU ideas, understandings, and institutions externally. It can relate to power-considerations by transferring EU rules and norms beyond borders to further self-interest in security, stability, prosperity, or environmental protection (Börzel and Risse, 2012:1-2,5-6). Explanations thereof vary according to how the EU is understood as an actor. Widely acknowledged as a source and driver of this is the single market; its size and consumer-spending are attractive to others, facilitating preference-pursuit (Damro, 2012). However, security, stability, prosperity, and environmental protection do not benefit only the Union. The notion of European identity grounded in constitutional principles that enshrine universal rights and values has led to the conceptualization of the EU as a normative actor promoting universal principles in global public interest according to various interpretations (e.g. Duchêne, 1973; Manners, 2002; Aggestam, 2008).

Conversely, international regimes, institutions and organizations also influence the EU's international relations (Jørgensen and Laatikainen, 2019), as well as external events. Geopoliticisation of space, ideas of globalisation, shifts in international sources of influence and contestation of a multilateral liberal world order can undermine the EU in multilateral governance, eroding the legitimacy of its constitutional principles for other actors. Alternative norms for global governance are emerging in the international sphere, drawing on different principles than the EU's such as fundamental respect for sovereignty (Diez, 2022:156; Odermatt and Wessel, 2019; Keukeleire and Delreux, 2022:323-328,342-344).

Section 1.2 outlines space as characterised by cooperation and competitiveness. Section 2.4 shows these understandings inform an actor's approach to space and its global governance. Technological and financial capability required for access to and activity in outer space are held predominantly by actors that are influential in global politics such as great and emerging powers. This means that geopoliticisation practices may extend to the realm by linking issues to objectives or concerns related to projecting or deterring hard power and resulting in behaviour that considers others seeking to project or deter hard power (Al-Rodhan, 2012:28-43).

The dissertation emphasises geopolitics as addressing spatial ordering based on such objectives or concerns (Raik, 2019), which links to international structures. These structures shape the international environment which diffusion addresses as spreading EU policies and institutions. In this sense behaviour informed by geopolitical considerations need not be limited to compulsory power but can also inform external strategies employed by the EU that influence

structures such as economic incentives or power of attraction (Browning, 2018). Geopolitics is therefore engaged by the dissertation as the study of how power relations manifest in different aspects of practising geopolitics, rather than as the relationship between geography and power itself (Zwolski, 2024:84). Reference to this thus considers use of geopolitical perceptions to justify policy in terms of influence and power over spaces and territory (Nizhnikau and Moshes, 2024:490).

3. Research Design: Examining Social Construction

The theoretical approach establishes that dynamics of outer space as competitive or cooperative inform an actor's perception of the domain and how global governance is engaged. Social constructs can be engaged strategically by actors shaping international structures to accommodate preference-pursuit and enhance power or to promote global common interest. External and internal factors may influence the construction of the EU as an international actor as well as its approach to global space governance. The research design is formed on this premise.

Validity of the research concerns efforts to establish a credible case that analysed discourses are constitutive of social reality, facilitating understanding of how the world is socially constructed. The research design therefore aims to ensure theoretical-explanatory coherence of contextual factors and textual evidence, minimal researcher bias, and plausibility (Halperin and Heath, 2020:373). To ensure this, section 3 and 4 transparently elaborate assumptions on effects of discourse, analytical approach, and research process (Carta, 2019). The research design is set up to examine the internal discursive construction of the EU as a space actor and address its approach to space governance including how power-considerations influence it. This provides insights into both the construction and positioning of the EU as an international actor in global politics.

3.1 Approach to Governance: Proactive or Passive?

To examine how the internal discursive construction of the EU as a space actor shapes its approach to global space governance and how this incorporates power-considerations, it is necessary to elaborate what an 'approach to governance' entails. Based on the theoretical perspectives addressed in section 2, the EU can assume a proactive or passive approach to global space governance. Although the analytical framework does not incorporate role theory, a proactive or passive approach may be considered similar to role-conception. Roles are socially constructed through the interplay of agency and structure, expectations, and capability, and are available to actors in various extents. Actor capacity assists development of mutual understandings and expectations on future performance (Bretherton and Vogler, 2003:32-36). A proactive or passive approach is determined interpretively through discourse analysis. To answer the research question the approaches are formulated in an exaggerated form here which

is necessary for their analytical employment, but are likely to overlap, incorporating permissible material and power gains, and co-developing space governance with international institutions and other actors.

Proactive: The EU seeks to influence governance facilitating preference-pursuit and incorporating power-considerations. Norm-based rhetoric is an attempt to influence organising principles aimed at shaping norms and values that inform actor's actions in outer space, setting standards for space governance and shaping global ordering principles for outer space. Opportunities for diffusion are presented as beneficial or desirable. Significant for this approach are autonomy as an actor, material and technological capacity, and economic non-dependence. The EU seeks to expand these factors.

Passive: Adherence to space law is linked to identity, restraining preference-pursuit regardless of power-considerations. Norm-based rhetoric is employed to focus on collective public interest and honour obligations to it. The EU acts as a facilitator for MS' access and actions in space, serving to co-ordinate national projects through financing and supporting technological development. In the international sphere, the EU supports the UN framework for space governance but does not actively engage in its development. Global ordering principles for outer space are reproduced. Actorness, preference-pursuit, and power-considerations are limited.

3.2 Discourse Analysis: Revealing Meanings and Perceptions

The ontological premise that structure and agency are co-constituted through intersubjective understandings requires research to engage in interpretation of discourse to reveal meanings and reasons for acting. Through interpretation the researcher's own stance may influence the general research agenda as well as resulting analysis. However, due to the theoretical approach's epistemological positioning it maintains reality can be studied in terms of stable meanings whilst emphasising researcher reflexivity and transparency to minimise bias. As elaborated in section 2.1, intersubjective understandings constitute identities and interests whilst social practices emanate from these understandings. Discourse refers to sets of language-usage and techniques employed to maintain these, through which social reality is understood and constructed (Klotz and Lynch, 2007:12). Constructivist thought asserts a link between material reality and discourse (Meyer and Strickman, 2011:67), but not all societal phenomena are of a linguistic-discursive character (Jørgensen and Phillips, 2002:61).

Social actors construct their world through discourse which expresses their identity and preferences as well as gives reasons which justify their behaviour to secure legitimacy. The dissertation builds on Habermas's theory of communicative action in considering social action as strategic or communicative, depending on specification of goal-directed actions (Carta and Morin, 2014:6). 'Strategic' refers to self-interested utility calculations whereas 'communicative' reflects cooperative processes of interpretation. Communicative actions stress intersubjectivity by pursuing reciprocal understanding and are legitimized through validity claims that are internally connected with reasons (Habermas, 1984:101,209). In the dissertation validity claims are not considered in terms of establishing grounds for shared moral practical sense, but as linking to political will formation.

Language is not just a medium to communicate, but also a constitutive practice. Actors use language to create accounts of the world, creating social meaning in a particular context (Bryman, 2012:528). Language does not only serve communication; in saying something we do something, it is a 'speech-act' (Austin, 1975). For example, a text published in the Official Journal of the EU does not only communicate its content; it has legislative, political, economic, and social consequences at various levels of analysis such as a Regulation formulating a new law. Speech-acts involve constitutive rules that prescribe how to express, communicate, and understand meaning, i.e. what is legitimate to speak about by whom in a particular setting and manner (Searle, 1995). The notion of a speech-act shows that discourse is not only a constitutive practice; it is itself also influenced by social structures. Discourse constructing the EU as a global actor entails prescriptions of what can and is to be done in global affairs. This is constituted by practices, pre-existing relationships, and identities whilst also contributing to their development or reproduction (Fairclough, 1992).

Discourse thus enables certain paths of action whilst excluding others; it is performative (Barbé et al, 2014:112-113). A crucial component of discourse analysis and consideration of power concerns omission or formulating an argument in a certain way rather than an alternative one and its subsequent effects (Bryman, 2012:531). This indicates discourse is closely linked to various forms of power in production of effects on actors, shaping their capacity to control their fate. Discourse may also support the performative aspect inherent to outer space and power. Consideration thereof relates to discursive practices which construct understandings of the world, social relations, and identities, as well as how these discursive practices further the interests of particular groups or actors (Jørgensen and Phillips, 2002:63).

Based on the theoretical approach's ontology and epistemology, and the understanding of language and discourse above, the dissertation employs critical discourse analysis as an empirical-analysis-approach that provides insight on linguistic-discursive dimensions of social phenomena (Fairclough and Wodak, 1997). This is facilitated by ontological commonalities however the dissertation does not share its normative purpose of revealing unequal social relations and promoting emancipation therefrom (Jørgensen and Phillips, 2002:64).

Discourse analysis examines how discourse gives legitimacy and meaning to social practices and institutions by analysing language, latent meaning, ambiguities, conventions, and omissions in text. As discourses arise in intersubjective and interactive processes, the meanings they produce can be understood in relation to context as the source, message, connection to other texts and events, and broader relations of power shaping the context (Carta and Narminio, 2021:343; Halperin and Heath, 2020:365). The choice of material determines local context as a communication's message, source, and audience. This is summarised for individual documents in Appendix II. Broad context consists of norms, values, beliefs and assumptions as well as resources and strategies characteristic of a community (ibid.:369). Local and broad context are incorporated into analysis throughout sections 5 and 6.

3.3 Research Scope: Single Case Study Delimitations

Discourse analysis's research strategy of linking actors' behaviour to context reflects a case-based rationale as social reality is constructed intersubjectively and actors' preferences and identities are influenced by structural context (Carta and Narminio, 2021:348). As a single case study that employs discourse analysis, the dissertation's research is essentially concerned with the analysis of patterns in collected data (Yin, 2009:269-270). Section 3.1 shows how the presence or absence of pattern is conceptualised and interpreted. Section 3.2 addresses how discursive patterns lead to a variety of outcomes or a specific outcome in constructing and positioning the EU as an international actor. Section 4 elaborates how this is operationalised.

In consideration of the research question's focus on global governance and how this incorporates power-considerations, outer space is a compelling case due to the nature of the environment being characterised by self-interest, competition, cooperation, and global public interest. Space policies reflect ideas about ordering the world, linking technological requirements and strategies, forming a realm into which actors project ideas, norms, and identities (Klimburg-Witjes, 2021:526). Discourse constructs the regime within which certain behaviours are considered appropriate, structuring behaviour. Although this will be of more

relevance in the future, present policies, motivations, and behaviour shape that future. The ongoing development of a normative regime based on space law as institutionalised in treaties and customary law facilitates the normative basis of the EU in global affairs as a starting point of enquiry and complements the abductive approach of the dissertation. Constructivism is particularly well-suited for abduction in qualitative research as research and use of theory co-constitute each other by collecting relevant observations and simultaneously applying concepts from existing knowledge fields (Bryman, 2012:401; Friedrichs and Kratochwil 2009:709).

The scope of the dissertation is determined not only regarding research purpose in providing insights into the construction and positioning of the EU as an international space actor but also practical considerations. A pilot study was conducted to ensure the applicability of the analytical framework as well as availability, quality, and relevance of case study data (Yin, 2009:255-256). This informed a practical decision to incorporate outer space governance as a narrative literature review instead of a dedicated sub-section of analysis. It further motivated the choice of conducting a single instead of comparative case study with the USA. Although this reduces the amount of individual research conducted, the framework and analysis are based on sociological insights from relevant literature in IR, European Studies, and International Law and draw on existing theoretical premises. The dissertation shows how the framework fits and develops said literature with the purpose of contributing to and extending it (*ibid.*:257).

The research is exclusively set on EU-level and addresses the EU as a unified actor as it does not examine internal deliberation, socialisation processes, or MS' national policies. Nonetheless, the analytical framework permits indications of internal dynamics at play within discourse. As identity is formed through social relationships that can change across context and time (Klotz and Lynch, 2007:65), it is considered reflected in constitutional law as a source of legitimacy and a driver of socialization as a starting point for analysis (Larik, 2016:256-258,262-263). Although this may limit the dissertation's engagement with identity, this is an analytically pragmatic choice to simplify a complex, dynamic, and multi-faceted concept that is both a component and outcome of actorness (Venet, 2013:51) and is coherent with the dissertation's general emphasis on law and rules.

The Lisbon Treaty represents a shift in the EU's approach to outer space, establishing the possibility for EU space policy and integration of various European space programmes, missions, and initiatives (Lieberman, 2021), although integration is horizontally differentiated (Davis Cross, 2021a:32). Hence the timeframe of the case study is set from 1 December 2009

when the Lisbon Treaty entered into force to 31 December 2023 with the Space Strategy for Security and Defence released March that year. The 31 December 2023 is a pragmatic choice as dissertation-writing commenced in January 2024. A longitudinal case study is well-suited for discourse analysis to detect patterns forming stable meanings.

As capability affects ability to exploit presence or respond to opportunity (section 2.2.1), documents establishing capability as a space actor are selected as material for research. The Official Journal of the EU as the publication of official information from EU bodies, agencies and offices, EU legal acts and other acts is a relevant source of material establishing capability given the legislative-starting point of the dissertation and understanding of discourse. Material is selected from the EUR-Lex website through a manual search using keywords ‘space’, ‘outer space’, ‘outer-space’ and ‘aerospace’. Documents are selected according to content or cross-reference in other texts based on reference to outer space or mention of legislation, strategies and policies relating to space (Appendix I).

Due to substantial cross-referencing, Commission Communications and Joint Communications with the High Representative of the Union for Foreign Affairs and Security Policy are incorporated into this process. Although these are not published in the Official Journal, they form an official communication amongst EU bodies and are accessible via EUR-Lex which facilitates their incorporation into the material selection process. Thereafter, selected documents are reviewed for analytical relevance based on substantial reference to or implications for international relations due to the research question’s focus on the construction as a space actor and its implications for an EU approach to global space governance. Documents selected for analysis are listed in Appendix II.

Despite using a single data collection method, the research centres on official discourses as research material, utilising a variety of source materials from the Commission, Council, and European Parliament which strengthens the dissertation’s approach of addressing the EU as a collection of institutions, competences, internal dynamics and processes whilst examining it as a unified actor in global politics (Yin, 2009:261,265; Klotz and Lynch, 2007:20). Official discourses present a collective, unified representation of MS' common values and collective identity (Risse-Kappen, 1996:39). They are reflective of internal dynamics of the EU, are considered legitimate by internal actors reflecting reasoned consensus (Carta and Morin, 2014:12-13), thus reflecting the actorness the Union assumes whilst setting a standard of

legitimacy. This determines local context for the discourse and provides indication of actor capability.

The research provides insight on construction and positioning of the EU as an international actor in global politics, contextualising the EU as an actor in space governance. The research design does not include others' expectations and perceptions. As such, it cannot account for how the EU or MS influence space governance beyond communicative action but incorporates sensitivity to the possibility of the space regime influencing the EU by emphasising context.

4. Analytical Framework: Assessing Stable Meanings

Based on the dissertation's understanding of discourse (section 3.2), the analysis examines the relationship between discursive constructions of the EU as a space actor, context, and its approach to space governance. Discourse analysis proceeds in two phases. Selected documents (Appendix II) are first analysed individually as discursive units. This phase of analysis nonetheless remains attentive that they provide context for each other and are interconnected, building and expanding on each other. As discourse is not restricted to a single text (Grant et al, 2004:12), the second phase considers the documents collectively as discourse constructing the EU as an international space actor, examining patterns and construction of stable meanings in the timeframe of the dissertation. Section 5.3 presents findings thereof and illustrates wider processes of change, both internally and externally (Fairclough, 1992:102). Based on these findings, section 6 discusses and evaluates the effects of analysed discourse. The analysis remains attentive to the interplay of internal and external factors throughout.

4.1 Context: Setting Parameters for Actorness

The context of ideas and events enables or constrains actorness, establishing a component of context. Context includes requirements for presence in space, addressing material factors such as financial and technical resources as well as technical knowledge or opportunities for bi- or multilateral cooperation. To pay due consideration material context and internal structures, the analysis begins with a brief examination of EU space assets and the European approach to space. As the EU is attributed international legal personality section 5.2 reviews the EU's party-status to and possible ratification of treaties as well as membership in multilateral institutions for space governance, as these facilitate development of agreements with others, diffusion, and add to opportunities to establish or increase presence. This influences the EU's ability to negotiate effectively with actors in the international system. In the discourse analysis local context is determined by individual documents as addressed in sections 3.2-3.3 (see Appendix II).

4.2 Discourse Analysis: Space Actor Construction

Analysis of discourse proceeds in three steps: 1) examination of content and meaning of the text, including local context; 2) examination of how meaning and beliefs are communicated, including linguistic features, i.e. the discursive dimension; 3) consideration of context (Grant

et al., 2004:11). Regarded in their entirety, this establishes the discursive construction of the EU as a space actor and its approach to space governance. Analysis of linguistic features of the texts addresses formal features such as vocabulary, grammar, syntax, and rhetorical detail. Attention to rhetorical detail addresses how arguments are formulated linguistically (Bryman, 2012:535). The analysis is attentive to use of linguistic devices and their effects. As discourse is a constitutive practice influenced by social structures and meanings can only be understood in relation to context, steps 2 and 3 are directly related. Although they are presented as analytically distinct, they are interconnected. Local context connects the degree of autonomy and source of a text to its communication of meaning and beliefs. Context is related to a text through consideration of nomination/predication, prescription for action, and discursive argumentation (Barbé et al., 2014:113-114). These are integrated as a single component of the analytical process but formulated as separate in the framework to facilitate clarity and transparency.

Nomination/predication entails to examining which actors, objects, phenomena, and actions are discursively qualified for consideration. This reveals the perception of the nature of outer space and understanding of space governance including its purpose. Additionally, it permits initial insights into perception of other actors, the EU's relation to them, and how power-considerations inform its approach. It alludes to perceptions of the international system and is therefore analysed in consideration of opportunity and capability (section 2.2.1). Prescription for action considers proposals in the text and evaluates whether these coincide with or correlate to expressions of material or strategic preferences, or normative imperatives. This does not necessarily correspond to an actor's true motives but provides their rationale. Discursive argumentation is an extension of this as it addresses assumptions justifying the EU's preferences, objectives, and implied prescriptions. Analysis considers instances of normative justifications, references to the EU's and others' power and preferences, as well omission or formulating an argument in a certain way rather than in another way.

4.2.1 General Considerations: Context and Power

Throughout all steps of analysis, general considerations ensure that the co-constitution of structure and agency are upheld. The analysis is attentive to how external factors may influence discourse. As noted in section 3.3, identity is considered in relation to constitutive principles as a starting point. It is appraised whether expressions of identity are linked to external factors and how a sense of self is developed within analysed discourse. Mention of multilateral forums

for governance are noted, as well as specific reference to international events and developments, or other actors and how these are perceived and represented. Although the research design does not incorporate others' perception of the EU it considers the EU's perception of others as identity-formation and construction of collective identities may incorporate an exclusionary dimension towards others that are perceived as different (Rumelili, 2022). This notion is reinforced by the dissertation's understanding of geopolitics (section 2.4.1).

Power is not formally operationalized due to its diversity but rather informs the entirety of analysis with particular emphasis on the approach to governance. To determine how power-considerations influence the approach, the analysis examines how space governance and the nature of the environment is characterised in terms of power and influence, and cooperation; how others and the EU's relationship to them are presented; whether a common fate with others is perceived and what importance is attributed to this (Beach, 2012:60). Particularly economic dependence, availability of assets, and functional adequacy of assets and capabilities are considered (Meyer and Strickmann, 2011:70), as these affect capability, opportunity, and autonomy.

As space is intersectoral, the analysis considers mention of policy areas to examine how outer space is perceived and engaged. Findings are evaluated against EU constitutional principles and foreign policy objectives where possible. Treaty-based space objectives are identified throughout the texts. Intentions, justifications, and explanations to increase presence are also considered. Analysis notes expressions of norms, values, and beliefs and asks whether and how these are used to create focal points; and if so, whether this advances preferences and is used strategically to shape or constrain others' understanding of these.

Official discourse may mention international norms to ensure legitimacy, but this does not automatically entail these are upheld in practice or interpreted according to their original normative substance. Despite the EU not being a party to the UN Charter, the UN framework is a central reference for the EU (section 1.1). Nonetheless, beyond rhetoric support the EU is shown to have a mixed relationship with the UN depending on policy area (Blavoukos and Bourantonis, 2017). The analytical framework distinguishes between rhetoric and concrete objectives or planned actions to evaluate adherence to and upholding of the space regime by providing an interpretative reading of whether planned investments, planned actions and reasons demonstrate adhesion to or promotion of these, or an attempt to influence them.

4.3 Evaluation: Actorness and Approach to Governance

Findings are structured according to key factors for global space actorness identified in the first phase of analysis. In the second phase of analysis, effects of analysed discourse are considered in repeated associations between elements, facilitating the perception of these as inherently connected. The meanings they produce thereby seem natural as a description of reality (Weldes 1996:284-285), which reveals stable meanings (Halperin and Heath, 2020:372). This establishes the discursive construction of the EU as a space actor and the extent to which discourse is constructive of a proactive or passive approach space governance. Section 5.3 addresses to what extent and how the EU seeks to influence global governance; whether this incorporates power-considerations; and if the EU seeks to expand these factors. Further discussion examines to what extent the EU acts as a facilitator for MS' access and actions in space, serving to co-ordinate national projects through financing and supporting technological development and whether this limits or expands actorness and power-considerations. Changes within the timeframe of the dissertation are discussed in relation to context. Section 6 discusses consequences and effects of analysed discourse.

5. Space Actorness and Approach to Space Governance

As elaborated in the previous section, analysis proceeds in two phases, which produce the findings presented in this section to respond to the research enquiry *how does the internal discursive construction of the European Union as a space actor shape its approach to global space governance and how does this incorporate power-considerations?* Section 5.1 establishes the internal dimension by outlining the European approach to space and EU space assets. Section 5.2 presents the EU's possible ratification of treaties as well as membership in multilateral institutions for space governance. Section 5.3 examines the internal discursive construction of space actorness in connection to the approach to global space governance and power-considerations. The findings presented in these sections are discussed in section 6 as consequences and effects thereof.

5.1 The Internal Dimension

The 2021 EU Space Programme is the first integrated EU space programme. Its components are the global navigation satellite system Galileo; the European Geostationary Navigation Overlay Service (EGNOS), a satellite-based augmentation system used to improve performance of global navigation satellite systems like Galileo; the Earth observation satellite constellation Copernicus; the planned Governmental Satellite Communications programme (GOVSATCOM) and the planned Infrastructure for Resilience, Interconnectivity and Security by Satellite (IRIS²), aimed at providing secure communication for safety-critical EU and MS missions, operations and surveillance. The European Union Satellite Centre is the EU satellite agency, providing geospatial imagery information services and products to civil and military operators. The European Union Agency for the Space Programme (EUSPA) is the operational agency of the Space Programme, responsible for security accreditation of all components, operational security, as well as space situational activities and operates the Galileo Security Monitoring Centre. It promotes commercialisation of Galileo, EGNOS, and Copernicus data and services. EUSPA may leverage EU funding with particular focus on small and medium-sized enterprises and start-ups.

Internally space matters are developed within the ordinary legislative procedure where the Commission has right of initiative whilst the Council and European Parliament are co-legislators, as well as the intergovernmental method for CFSP-related matters where the

Council acts unanimously (section 1.1). The Directorate-General for Defence Industry and Space is responsible for Commission activities in space matters. The combination of space with defence industry connotes the strong security-component the geopolitical Commission attributes to outer space, alongside an industrial emphasis present throughout analysed discourse. The Council incorporates space policy into its competitiveness configuration (European Council, 2010). This indicates an economic-industrial focus. Competitiveness is a major focal point throughout analysed discourse regardless of EU body.

MS possess a broad array of space assets, often incorporating cooperation and interdependence, including involvement in commercial entities (Muñoz and Portela, 2023:5). The European Organisation for the Exploitation of Meteorological Satellites EUMETSAT is an inter-governmental operational satellite agency independent of the EU that provides actors lacking capabilities access to meteorological services. The European Space Agency (ESA) is an intergovernmental organization independent of the EU framework; much of its activity occurs on MS level but it also engages substantially in international cooperation, most notably on the International Space Station (ISS). Historically it is the most directly involved European actor in space activities, often considered second only to NASA in global space efforts. ESA emphasises science and peaceful use of space which may contradict the EU's political- and security-oriented approach to space (Davis Cross, 2021a).

Nowadays the EU aims to provide political steering whilst ESA is responsible for development, design, and construction of space infrastructure and provides technical and operational expertise (Aliberti et al., 2023:141). Under the 2004 cooperation framework agreement the Council in its competitiveness configuration and ESA Ministerial Council hold joint meetings known as the Space Council when deemed necessary to identify priorities for European space initiatives, however it is observed throughout analysis that political steering of EU space policy shifts from the Space Council to the EU as its capability expands. 19 of ESA's 22 MS are EU MS. Switzerland and Norway may cooperate within the EU Space Programme under the European Economic Area whilst the UK may participate as a third state under specific agreements (Regulation 2021/696; Smith, 2021). Nonetheless, the EU does not consider ESA a political actor; therefore the European approach to space incorporates a separation of science and politics (Klimburg-Witjes, 2021:537,539). The creation of EUSPA and an integrated space programme is indicative of expanding space actorness as EU agency is not affected by institutional restraints of the ESA. Expansion of autonomy in developing priorities and decreasing ESA-influence is reinforced by analytical findings.

Concerning space power status, Europe collectively (EU, MS, ESA) is considered a primed spacefaring power after the USA, China, and Russia (Eurospace, 2022:8; Aliberti et al., 2023:186-187). Assessed as close to attaining space power status if autonomy is enhanced, Europe possesses advanced space capabilities (ibid.:202). Autonomy in conducting space activities is reliant on specialized competencies such as technological and operational expertise, ownership and control over critical space infrastructure, particularly launching capabilities (Klimburg-Witjes, 2023:3). Operations are deployed with European launchers Vega and Ariane from the CSG spaceport in Kourou, French Guiana. As a region of France, it is part of the EU thus considered a European spaceport despite being geographically located in South America.

Material context for the EU cannot be accurately assessed at the time of writing as publicly available, free-access, high-quality macroeconomic statistics on the space economy are under development, to be published at the end of 2024 (Eurostat, n/d). This reflects lack of a regulative framework for the space industry and market as well as difficulty of distinguishing between 'Europe' and 'the EU' in space. It is estimated that Europe (including non-EU states) produced 1/3 of satellites globally in 2018 (EEAS) and revenue of the European space industry was €8,6billion in 2021 (Eurospace, 2022:10). Europe is considered one of the largest space industries globally. From 2007-2021 the EU's space budget has increased by 164% (Whittle et al., 2021:24,17). A financial envelope of €14.8billion has been allocated to the space programme until 2027 (Regulation 2021/696:Art.11.1), corresponding with a steadily increasing budget for space activities throughout the timeframe of analysis. In 2019 33 EU-owned satellites were in orbit (Bieńkowska in de Concini and Toth, 2019:5).

5.2 Membership in Multilateral Institutions

EU actorness and ability to participate in space governance is structurally restricted by international law as becoming a party to international agreements or membership of international organizations generally applies only to state-actors (Larik, 2023:1137). Unlike MS the EU cannot become a party to the OST or MA. ESA accepts the rights and obligations of the ARA, RC, and LC but the EU has not formally accepted these treaties at the time of writing. The EU attained permanent observer status in UNCOPUOS in 2018. It participated actively alongside MS in the UN open-ended working group (OEWG) on reducing space threats through norms, rules and principles of responsible behaviours from 2022-2023 (Bataille and Porras, 2024:14-24). As an enhanced permanent observer to the UNGA, it attended

UNISPACE+50 in 2018, the fourth global high-level segment on outer space governance which produced Resolution A/RES/73/6 that gave rise to the Space2030 Agenda which serves to charter the future framework of global space governance (A/RES/76/3:para.6). It addresses the contribution of space activities to the 2030 Agenda for Sustainable Development.

In 2022 EUSPA and UNOOSA signed a memorandum of agreement on partnership addressing international cooperation; use of space technologies, services and data for sustainable development; and fostering the space economy (EUSPA, 2022). In 2023 it published the joint report ‘Contribution to the "Space2030 Agenda": EU Space - Supporting a World with a Global Population of 8 Billion People’ (UNOOSA, 2023a). The report raises awareness on the EU’s contribution to the Space2030 Agenda and places it as a central contributor to the UN framework. This constitutes a proactive approach to global space governance in keeping with space law such as the common benefit principle. It presents an opportunity for diffusion of the EU’s approach to space and norms and is an active move in EUSPA’s commercialization of Galileo, Copernicus and EGNOS data and services, promoting EU preferences and expanding structural and institutional power. Nonetheless, this also reflects the EU’s normative commitment to good governance, sustainable development, social solidarity, and respect for the UN system.

Copernicus contributes to the Group on Earth Observation System of Systems (GEOSS) and the Committee on Earth Observation Satellites (CEOS) which share satellite data to assist with environmental monitoring, natural disaster warning, and economic development. The Commission is a member in both institutions. Galileo contributes to the International Committee on Global Navigation Satellite Systems and serves as an instrument in the International Satellite System for Search and Rescue. This contributes to space exploitation benefiting all. EUSPA is a member of the International Astronautical Federation, the leading international space advocacy body with the objectives of developing astronautics for peaceful purposes and circulation of scientific and technological information. Notably, EUSPA is not a member of the International Space Exploration Coordination Group (ISECG), where ESA, France, Luxembourg, Germany, Portugal, Italy, Poland, Romania, and other space agencies including Russia, USA, Japan, China, India contribute to coordination of space exploration. This corresponds to an overall diminished focus on space exploration by the EU, expanded in section 6.

5.3 Discursive Construction, Power, Approach to Space Governance

This section presents collective findings based on analysis of discourse establishing the EU as a space actor. Findings represent the perception of the EU in analysed discourse. To justify interpretive assessments and enhance transparency, individual documents are referenced as exemplifications, however as elaborated in section 4 the analysis presents patterns and the construction of stable meanings, thus findings are present throughout most analysed documents. Examples therefore serve as illustrations of analytical evaluation but are not limited to the referenced documents. To facilitate transparency and clarity, specific paragraphs and articles are cited where possible, however due to variety in typographical presentation Communications reference page numbers. For ease of reading analysed documents are allocated an abbreviation referencing to Appendix II, where documents are fully referenced. Internal factors which indicate development as a space actor are presented, but this section only addresses these where relevant to the research question: *How does the internal discursive construction of the European Union as a space actor shape its approach to global space governance and how does this incorporate power-considerations?*

Global actorness of the EU is considered a requirement for delivering on internal objectives, whereas space is considered to strengthen the EU internationally (e.g. COM/2010/614:24; COM/2011/152:9; COM/2016/705:2,11; Regulation 2021/696:Art.4). These aspects of actorness are therefore regarded as mutually reinforcing and intrinsically connected. External context is used to justify expanding actorness and as prescription for action, therein seized as opportunity but also indicating perception of the domain as competitive. Security and stability of the space domain are regarded as the main purpose of global space governance which informs the EU's approach. The following sub-sections elaborate upon this and show how global governance is engaged to enable the EU to deliver on internal objectives such as the green and digital transition as well as safety and welfare of citizens and advancing its constitutional principles and preferences in global affairs using space assets.

Actorness develops through focus on specific capabilities with a strong international dimension which facilitates capability expansion alongside development as a global actor. External context is regularly linked to security and the EU in global affairs, seized as opportunity to expand actorness and to justify this within competence-distribution based on the principle of subsidiarity. Each capability builds and expands upon preceding ones as components of the current EU Space Programme. For example, the Global Monitoring for Environment and

Security (GMES) programme contributes to security through emergency response and strengthening the EU's global role in the climate regime (2011/C/44/26). Global space governance is addressed in the form of GEOSS, and CEOS (2011/C/44/26:para.3.7; Regulation 911/2010:para.28,38,Art.4; COM/2011/152:10). This expands to space surveillance and tracking (SST) which deepens association with security, particularly for space infrastructure (Regulation 377/2014). The approach to global space governance includes active development of a code of conduct for space activity presented at the UNGA (Decision 541/2014/EU; Decision 2015/203/CFSP). SST is later incorporated into space traffic management (STM) which has potential of introducing regulation across a majority of phases of space activity to expand from the EU to regional and then global level with the EU serving as a model (JOIN/2022/4; Regulation 2023/588:para.26).

5.3.1 The European Spacescape

The European 'spacescape' is fragmented (von der Dunk, 2017). As indicated in section 5.1, European space efforts are developed by ESA; MS and their national space agencies; and the EU with internal steering provided by the Commission and CFSP-related efforts driven by the Council. This leads to a constellation of different institutions with different members, decision-making procedures, and budget implementation based on national, intergovernmental and communitarian approaches, diverse competences and preferences (Aliberti et al., 2019:3). Whilst this permits flexibility for MS and has led to a diversified space industry (Reillon, 2017:32), it restricts EU actorness potentially diminishing coherence which could impede representation in multilateral forums. There is also a risk of duplicated efforts accompanied with investments costs. This is employed as justification for increasing capability and possible regulation throughout the timeframe for analysis. Whereas it is at first treated as natural discourse begins to consider this as potentially problematic as autonomy as a space actor begins to develop in 2011 with the onset of developing a space strategy (COM/2011/152:10-12).

Proposals for possible integration intensify from 2021 with the EU's first integrated space programme indicating a push for stronger EU initiative in space matters (Orešković and Grgić, 2021). This could expand actorness by increasing capability, as evidenced by repeated suggestion of an EU space law and a STM framework (e.g. JOIN/2022/4; JOIN/2023/9:3-4), further expanded upon below. These ideas have traction for space actorness and the approach to global space governance. Due to multiplicity of space law sources and its ambiguity, development of customary law as instant custom (section 2.3), and increasing involvement of

private entities, the large amount of cooperation in space activities generally addresses who is responsible for what, particularly relevant for financing and liability, in bilateral and ad-hoc agreements (Cakir, 2021). Hence, a common EU framework may be beneficial and provide a model for global governance where agreements within the EU framework form the basis of future treaties (ibid.:34; Rosamund, 2005:472-475). The STM framework builds on this notion in its approach to global space governance, serving as an example of good practise and envisioning the growth of the geographic scope of EU policies by extending the EU STM framework to the regional and global level over time (JOIN/2022/4:14; Regulation 2023/588:para.26). This reflects a consideration of structural power and presence as shaping what is considered appropriate influencing perceptions, expectations, and behaviour of others.

At the onset of the timeframe for analysis space capability is frequently addressed using the adjective ‘European’ and emphasising joint development with ESA, with the EU often presented as a facilitator and coordinator rather than an autonomous space actor (e.g. 2011/C/44/26:para.2.3,2.5). However, autonomy as a space actor from ESA is increasingly perceived as capability grows, reflected in distinction between EU and ESA and formulations such as “The EU is a major international space-faring actor with an *own* European Space Policy and Space Programme” (JOIN/2022/4:1, emphasis added). Despite distinctions between ESA and EU, cooperation is still promoted and perceived as desirable throughout discourse. Conceptualisation of power as capacity to control one’s fate permits the inference that autonomy from ESA in formulating priorities and policies expands capacity to control one’s fate autonomously, thus this development suggests power-consideration.

5.3.2 Intersectoral Space and Security

Discourse consistently links space to elements that underscore the importance of space assets and capabilities, both for internal objectives such as the green and digital transition and strengthening the EU as a global actor. The EU’s engagement of the domain is best summarised in the following quote:

“Space policy is driven by three main imperatives: societal (the benefits for citizens well being that can be derived from space exploration and use), economic (space generates knowledge and is a driver for innovation) and strategic (space contributes to the European Union's projection as a global actor)” (COM/2010/614:24).

Competence-distribution influences global action through emphasis on industry, competitiveness, and trade in the internal discursive construction of the EU as a space actor. This is supported by the distribution of policy areas in analysed discourse with an emphasis on industrial policy and internal market, research and technological development throughout (Appendix II).

Research and technological innovation are linked to industry, competitiveness, and trade and most frequently associated with increased allocation of funds alongside development of EU space capabilities (e.g. 2011/C/44/26:para.,1.5,1.12,4.4; COM/2010/614:3). This is supported by Horizon 2020 (Horizon Europe after 2021) and Commission incentives that are rarely mentioned in discourse such as the Competitive Space Start-ups for Innovation Initiative (CASSINI) or the Flight Ticket Initiative (EUSPA, 2024; European Commission, 2023b). Through the understanding of industry as including the entire supply-chain, research and technological innovation; security is linked to these elements, often in form of economic non-dependence and technological autonomy (e.g. COM/2011/152:6,7; Regulation 2021/696:para.1,8,18,19,20,60,Art.4,6; JOIN/2023/9:5,13).

Throughout discourse security is conceptualised as citizen's safety; resilience and safety of space assets; economic non-dependence and autonomy from others, particularly autonomous access to space. Security translates to social, environmental, and economic benefits for EU citizens through the contribution of space data and services. Trade, market-access in third countries, and stimulating economic growth are consistently linked to technological development and industrial competitiveness which benefit the Union and contribute to economic non-dependence. These factors are often connected by standardisation (e.g. Regulation 2021/696:para.62;Art.6.1(g); JOIN/2022/4:10; JOIN/2023/9:4-5,7). As an exclusive competence, trade policy is connected to upholding competence-distribution whilst influencing space policy.

The significance of space and its intersectoral nature are used as justification to expand EU initiative on space throughout analysed discourse. In keeping with the principle of subsidiarity, discursive argumentation consistently assures that competence-distribution is upheld but that action at the national level is insufficient. Space infrastructure is consistently identified as critical infrastructure that is without exception associated with citizen's welfare and safety. Safety and resilience of space infrastructure is correspondingly presented as a core concern in engaging with global governance from the onset of the timeframe of analysis, as this relates

back to societal, economic, and strategic imperatives. Section 5.3.4 expands upon this. The international dimension and uncertainty in policymaking promotes development of capability, manifested in an integrated approach to space.

Context and perception of the domain as competitive, increasingly contested, and congested are highly significant and reinforced by external and internal pressures. The 2008 economic crisis shapes perceptions of research and innovation as vital for stimulating economic growth and global competitiveness (Ulnicane, 2017:110,114). COVID-19 prompts considerations of autonomy and control of critical infrastructures (Jacobs et al., 2023; Ryan, 2023:125). Of high relevance are developments from 2014, such as instability and conflict in the Middle East and Northern Africa; migratory pressures; Russia's invasion of Ukraine in 2014 and 2022; the Trump administration's positioning on multilateral cooperation (Howorth, 2020:320); as well as ASAT testing, further elaborated below. These developed against the backdrop of a changing global environment outlined in section 2.4-2.4.1 (Müller, 2017:141,146), affecting inter-action dynamics in space, leading to reflection of terrestrial geopolitical tensions (Aliberti et al., 2020:26-31).

This is observable as a shift in discourse from 2016, which does not amount to a simple increase in emphasising security, which continues to develop as outlined in section 5.3 by building from one capability to the next gradually expanding actorness based on the principle of subsidiarity, but rather that other factors are employed less as discursive argumentation. This makes security the central focus and motivation for expanding capability and engagement with space governance, although an integrated approach is upheld. Dual-use of space assets and military-civilian synergies are increasingly qualified for consideration in space policy (e.g. COM/2016/705:8,10,12; Regulation 2021/696:para.2,51). Threat-rhetoric increases and actions of others are perceived as potential threats (e.g. JOIN/2022/4:1; JOIN/2023/9:1-2). Prior to this shift, discourse considers natural phenomena and space debris more of a risk to space assets than intentionally hostile behaviour of others (e.g. COM/2010/614:25; COM/2011/152:6). Context is likely to have influenced this development as it is in keeping with studies that identify a growing power- and interest-based stance, geopolitical considerations, and autonomy in EU strategy and policy (Tocci, 2017; Nitoiu and Sus, 2019; Matthijs and Meunier, 2023). It corresponds with the maturation of EU space capability through programmes such as Copernicus (Regulation 377/2014) and development of a European space strategy (COM/2016/705). Security also feeds into autonomy and power-

considerations in relation to ESA as it justifies consideration of EU-influence on ESA measures and programmes through providers of goods and services (JOIN/2023/9:6).

Based on the intersectoral characteristics of space, this security-based argumentation determines the EU's approach to space governance, both for internal objectives and strengthening the EU as a global actor across issue-areas. It is linked to the EU's pursuit of advancing its principles and preferences in global affairs, such as security in space which benefits all space systems, reflecting global common interest (e.g. Regulation 2021/696:para.88,Art.4.1(d-e); JOIN/2022/4:1); development, particularly use of space data and services in Africa (e.g. COM/2010/614:25; COM/2011/152:10); and environment, e.g. monitoring compliance with international treaties (e.g. COM/2011/152:5; 2015/2276(INI):para.4; COM/2016/705:11).

Applying the analytical framework reveals that internally stimulating the space market and industry alongside trade are consistently associated with increasing the EU's structural power in global affairs. By increasing global market-share of the European space industry, promoting use of European space data, services and standardisation, other actors' capacities may be influenced. Trade policy instruments such as dual-use export control and market access are key capacities for the EU as a space actor alongside diplomacy (e.g. COM/2016/705:11; Regulation 2021/696:para.13; JOIN/2023/9:6). Research thus indicates discursive linkage between autonomy, technology and industry across interconnected policy areas (Csernaton, 2022).

5.3.3 Autonomy and Access

As addressed in the previous section, autonomy is central to security-concerns. Discourse shows growing consideration of autonomy from others. This corresponds to context as well, reflecting consideration of others' compulsory power for example in the relationship to Russia. In 2011 launching capability is perceived as autonomous despite utilisation of Russian *Soyuz* rockets and capsules. The analytical framework permits this assessment in the formulation "Europe needs to keep independent access to space" (COM/2011/152:3). If Europe needs to *keep* independent access, that implies it currently *has* independent access. This statement is made as CSG ensures European spaceport facilities (COM/2011/152:7) but reveals that launcher-dependence is not perceived or at least not considered as being affected by cooperation with others, despite mention thereof as a strategic sub-sector (COM/2011/152:8). This is related to the strategic partnership between Russia and the EU at the time (European Commission, 2011).

Ariane rockets are used for heavy payloads and Vega for light payloads (Cakir, 2021:23). No European alternative exists for *Soyuz*, commonly used for transporting astronauts and medium payloads (Klimburg-Witjes, 2023:3-4). Following Russia's 2022 invasion of Ukraine, *Soyuz* launches from CSG are cancelled (ESPI, 2022). SpaceX's Falcon 9 is utilised for launches from a US spaceport for individual European missions instead (ESA, 2023; Posaner, 2024), highlighting relevance of private actors, dependence, and the importance of a relationship with others that possess spaceports such as the USA. With initial flight planned in 2024 and 2026 Ariane 6 and Vega-E are set to decrease dependence and enhance autonomy (Arianespace, 2024; ESA, 2024; Avio, n/d; ESA, n/d).

The EU identifies access to space as a fundamental requirement for space policy emphasising launch-autonomy, cost-effective access, and competitiveness (European Commission, n/d). These are amongst the main challenges for EU space policy, particularly in the private sector of the European space economy (de Concini et al., 2019:8-9; PWC, 2020; Aliberti et al., 2020:34-68), although they are rarely explicitly addressed as such and projection as a leader in space with world-class systems is preferred, based on space assets such as Copernicus, Galileo, and systems for exploitation of their data and information (e.g. COM/2011/152:4; COM/2016/705:2,3; Regulation 2021/696:para.1). In these areas the EU displays capacity to deploy economic policy instruments through trade and foreign direct investment screening. As noted in the previous section, this not only supports internal objectives but may affect others' capacities. It also links to autonomy as other actors may promote systems and technologies that only their space industry can provide, affecting technological non-dependence and industrial competitiveness (Moranta et al., 2020:38-40).

Despite increasing emphasis on the EU as an autonomous space actor from ESA, there is no distinction between 'European' or 'EU' access to space. Although a binary distinction is admittedly not necessary, due to its prior engagement with the fragmentation of the European space landscape, analysis notes this to ensure consistency. Here the EU is presented as a coordinator and facilitator, e.g. aggregating launch demand (COM/2016/705:8-9; Regulation 2021/696:para.6,Art.5; JOIN/2023/9:7). Ariane is costlier than other launchers such as SpaceX's Falcon (Alp et al., 2023:7), diminishing global competitiveness. Technological development affects this, e.g. through availability and functionality of reusable components within launchers which increase sustainability and decrease costs (Ceurstemont, 2020; Stappert et al., 2019). These issues are addressed indirectly through stimulation of industry, Horizon Europe, and Commission incentives (see section 5.3.2).

5.3.4 Approach to Space Governance

Association between security and global space governance is not unfounded, nor an exclusively internal development. Space activity emerged during the Cold War driven by the Soviet Union and USA. Due to the political environment of the time as well as potential of space-based weapons, security was an immediate concern for the international community. Since humankind has gained access to space, security is thus understood as global common interest in space governance. Much of global space governance develops under the umbrella of disarmament and non-proliferation institutions, based on the peaceful purposes principle in combination with the ban of nuclear or weapons of mass destruction in outer space (Bourbonniere, 2005; Zahoor, 2017). The EU's objective of developing space law is expressed through efforts to develop an international code of conduct for outer space activities and initiative on developing an EU STM framework to be expanded into a global STM effort. These are linked to security, revealing the perception of outer space governance, and motivated particularly by ASAT testing.

Tests on destruction of satellites in space, referred to as ASAT tests, have become a prominent outer space issue in the 21st century with actors such as the USA, Russia, China, and India conducting tests on own satellites in the external context of the document from 2007, resulting in an increase in space debris that heighten collision potential with space-based infrastructures which are considered critical infrastructure by the EU. Space-based ASAT capabilities are incorporated into OST within the context of arms control in outer space, based on the peaceful purposes principle. Earth-based ASAT capabilities are not addressed by space treaties; thus, several proposals have been made to address this issue with differentiated traction within the international community that often reflects political alignments amongst global actors (Su, 2021; Raju, 2021:3-6).

In 2007 China conducted a successful ASAT test, raising the question of appropriate space conduct in global debate. The EU's code of conduct initiative was first presented in 2008 (Council of the EU, 2008). In the timeframe for analysis the initiative is presented as cooperating comprehensively with the UN, however its development in consulting third states took place outside the UN framework, facilitated by the European External Action Service (EEAS) (Decision 2015/203/CFSP:para.9,Annex1). Despite perception of the development as successful (Decision 2015/203/CFSP:para.9,10-12), it ultimately failed to gain support at the UN, partially due to the EU's status as a permanent observer, which meant it was discussed as

a consultation rather than a negotiation, as well as opposition from other actors that critiqued the development of the code for being developed outside of the UN framework and inadequately inclusive (Bataille and Porras, 2024:10; Pellegrino and Stang, 2016:59).

This indicates the relevance of institutional power for collective outcomes as well as cooperation with actors that are stakeholders in space activity. Discourse shows consideration thereof as cooperation with and consultation of others (e.g. Decision 2012/281/CFSP:para.7-8,Art.1-2; JOIN/2022/4:13); emphasis on cooperation with or support of the UN framework and its relevant bodies (e.g. Regulation 377/2014:para12; COM/2016/705:11; JOIN/2023/9:14-15); as well as cooperation with strategic partners, especially USA and NATO (e.g. 2015/2276(INI):para.C; JOIN/2022/4:14; JOIN/2023/9:15-16) supporting the security-component. Consultation of stakeholders is addressed, however engagement with civil society is limited therein.

Cooperative dynamics are thus perceived within the domain. This rests not only on perception of a common fate but is presented as essential to preserving peace, preventing conflicts, and strengthening international security (e.g. COM/2011/152:9; Decision 2012/281/CFSP:para.3; Regulation 2021/696:para.23,95). Normative considerations of global common good or promotion of multilateral governance within the UN framework are often considered as complimentary to preserving the Union's and MS' diplomatic, economic and political interests rather than as prescription for action, despite being presented as justifications for preference and international behaviour (e.g. JOIN/2022/4:13). Thus, the cooperative element is connected to security-based argumentation and power-considerations.

The cooperative notion is present throughout analysed discourse. However, in its efforts to promote norms and principles for responsible behaviour in outer space the EU is presented as having to “convince the vast majority of UN member countries of the relevance of a normative approach” (JOIN/2023/9:15). This formulation may refer to achieving required numbers of support in voting procedures, but use of the word ‘convince’ implies that there is insufficient support, inferring that a *vast majority* of UN members do not support or recognize the importance of this. It relates subtly to the overall impression of space as competitive and contested. The EU's approach of diffusion identified in analysis informs this notion in seeking to develop global structures.

The suggested STM framework notes there is no globally accepted definition for STM and proposes one for EU-level. STM links to space debris and correspondingly ASAT testing, as it

contributes to reducing collision potential. It is planned to address SST; management of space orbits and radio spectrum; orbital debris mitigation; life-cycles of operations including launch, in-orbit operation of spacecraft and de-orbit operations; and re-entry of spacecraft (JOIN/2022/4:2-3,6-12). This is a wide spectrum of space activity that addresses the majority of space operation phases, implying a high degree of EU-influence or potentially regulation in space activities from planning to execution. If a proposal on STM were accepted and perceived as successful by others, the EU could gain influence in global space governance by virtue of presence and serving as a model (section 5.3.1). This consideration is alluded to by outlining a process of extending the EU STM approach to the international level (JOIN/2022/4:13-14). Additionally, this would bolster legitimacy and credibility in proposing international frameworks, enhancing influence i.e. enhancing structural and authoritative compulsory power.

Space governance was reintroduced into global debate with multiple developments in the UN framework including UNISPACE+50 in 2018; the UN OEWG on reducing space threats through norms, rules and principles of responsible behaviours in 2022; and UNGA Resolutions such as the 2022 Resolution on Destructive Direct-Ascent Anti-Satellite Missile Testing (A/RES/77/41). ASAT testing provided impetus for the intensification of global governance efforts, with Russia conducting a successful test in 2021 that caused large amounts of space debris, anticipated to remain in orbit for 15 years and regularly threatening to collide with the ISS (Todd, 2022). This event is referenced in the Space Strategy for Security and Defence (JOIN/2023/9:1). ASAT testing is perceived as “the weaponisation of space” (2015/2276(INI):para.I) where global governance serves the purpose of preventing an arms race (2015/2276(INI):para.27; JOIN/2023/9:17).

Discourse rarely refers to space law, even when discussing a global code of conduct on outer space activities (Decision 2012/281/CFSP). Towards 2016, when the Space Strategy is published, first clear endorsements of adherence to space law are made, which is noteworthy given the importance allocated to the UN framework in global affairs in general (section 1.1). Formulations addressing space law note it is tested to the limit or suggest need for development accounting for technological progress (e.g. COM/2016/705:11; 2015/2276(INI):para.27,43), revealing that these are perceived as outdated and limited (JOIN/2022/4:4). This changes in 2021 with the Space Programme. The 2022 EU Approach to STM shows the most substantial engagement with space law (JOIN/2022/4:13). Emphasis on promoting EU positions and approaches on norms, rules, and principles of responsible behaviour in multilateral forums grows alongside public diplomacy such as the EEAS’ Safe, Secure and Sustainable Outer Space

initiative (e.g. JOIN/2023/9:14,15; Regulation 2021/696:para.13,Art.4.1(d)). This correlates with EUSPA's growing engagement with UNOOSA (section 5.2), reflecting the objective of expanding global relevance as a space actor and growing consideration of institutional and structural power, which may assist in attaining an advantageous position to shape international institutions to advance or preserve preferences (e.g. Regulation 2021/696:para.12,13; JOIN/2022/4:13-14).

Discourse is consistently in line with principles of space law such as common benefit and peaceful use, interpreted as non-aggressive purposes (section 2.4), as space is clearly linked to military services and functions (e.g. 2015/2276(INI); Decision 541/2014/EU; JOIN/2023/9:10-14). Outer space is engaged as a global commons (e.g. Decision 2012/281/CFSP:para.1; Regulation 2021/696:Art,4.1(d); JOIN/2022/4:1,13; JOIN/2023/9:1). However, the EU has not expressed formal acceptance of rights and obligations of ARA, LC and RC which may diminish legitimacy as an international space actor engaged in global governance. Most recently the 2023 joint contribution to the report of the UN Secretary-General following UNGA Resolution 77/251 states it is examining possibilities of accepting these (UNODA, 2023).

The EU approach to space governance is proactive in the sense that it seeks to develop and influence international structures, but these efforts are limited to specific issue areas connected to security, such as space debris. Space mining for example is not qualified for consideration although it is set to become a central topic for space governance soon. Relatedly, although NewSpace is perceived as an opportunity internally, the rapid growth of private and commercial actors and activities on a global level is presented as increased risk linked to congestion of space and competition that underscore the relevance of security and competitiveness (e.g. COM/2016/705:5;11; JOIN/2022/4:3,4,8; JOIN/2023/9:13), but results in lacking engagement therewith in connection to space governance.

As such, the EU seizes opportunity in the context of space governance, seeks to exploit presence and promote diffusion through standardisation and market-access. Findings show a combination of a passive and proactive approach to governance as outlined in section 3.1. Recent developments such as EU space law and a STM framework are discussed hypothetically as they have not been formally proposed yet, reflected by use of conditional verbs in analysed discourse (e.g. JOIN/2023/9:3-4). They are included in analysis as this is presented in official discourse and indicates ambitions of the Union, hence they are relevant for the research question. The EU supports the UN framework for space governance and seeks to influence it

which facilitates preference-pursuit and incorporates power-considerations. Autonomy as an actor, material and technological capacity, and economic non-dependence are highly significant for the EU, and it seeks to expand these. However, in areas such as launcher capabilities it acts as a facilitator by aggregating demand and stimulating technological development. This indicates that through the internal discursive construction of the EU as a space actor and its approach to space governance, global ordering principles for outer space are reproduced, elaborated upon in the following section. The internal construction of the EU as a space actor and its approach to global space governance is in keeping with the treaty-basis and objectives but there is unrealised potential therein, e.g. Article 189 TFEU extends to space exploration, further discussed in the next section.

6. Space for Actorness and Power

This section is based on how the internal discursive construction of the EU as a space actor and power-considerations shape its approach to global governance. As global actorness and internal objectives are understood as complementary and through emphasis on security, the EU uses global context and perception of the domain as congested and competitive to expand actorness and power. Although this is effective internally, based on the analysis' assessment on the development of capability, it sustains dynamics of power projection and competition in the domain. The following discussion elaborates the effects of analysed discourse and demonstrates that the EU is geopolitical in space through its emphasis on security but may shape global organising principles through presence and cooperation.

Although it may be argued that findings indicate a form of securitisation of space policy, they should not be overemphasised but rather considered relative to the content and meaning of analysed documents. The security-dimension provides justification for expansion of space capability based on the principles of conferral and subsidiarity, and Article 189 TFEU. It is used to link different policy areas as well as external and internal objectives through the intersectoral nature of space. Some documents selected for analysis incorporate a strong security component by virtue of their content and meaning (Decision 2012/281/CFSP; JOIN/2023/9; Regulation 2023/588). The internal discursive construction of the EU as a space actor shapes its approach to global space governance through security-based argumentation. This results in strong analytical emphasis on security as this element shapes the understanding of global governance and its purpose. Rhetoric deployed in analysed documents is generally neutral even when addressing perceived threats, although threats are perceived as more direct and consequential in recent years. If any rhetoric were to be commented on, it would be a Europeanist one in the discursive emphasis on autonomy, but this is neutralised through use of language and continuous consideration of cooperation with others.

As noted in section 1.1 space policy excludes harmonisation, hence competence-distribution influences the construction of space actorness as EU legislation may not modify national law. EU space policy is therefore constructed in association with sovereignty, not only as a matter of foreign and security policy or competence, but also within space governance based on space law, where states remain the ultimate enforcers despite proliferation and relevance of non-state actors. Despite its status as global commons and the non-appropriation principle, international

law facilitates pockets of sovereignty within outer space (Nayebi, 2011:475-476). Only states may become party to the OST, considered the *Magna Carta* of space, and through international law remain responsible for launches and the regulation of commercial entities within their territory (ibid.:481; Jakhu and Freeland, 2016:192-195).

This is reflected in the EU's development as a space actor in launch-capabilities where it remains a facilitator for MS' access to space, co-ordinating projects through financing, supporting technological development, and demand-aggregation. In combination with its strategic relevance for security and defence, space activities are inherently connected to the performative aspect of space power with national identity and prestige (Al-Rodhan, 2012:29; Patarin-Jossec, 2020:264-265). Space is therefore often linked to notions of sovereignty. This presents a structural restriction for EU space policy and global engagement, overcome internally by the dimensions of security, industry and trade as discussed throughout analysis. Due to structural restrictions of the EU, increased cooperation with MS in international forums is key to effective global action.

Although the European spacescape is fragmented which may present challenges (section 5.1, 5.3.1), discourse utilises common heritage of European space activities (e.g. COM/2011/152:3) to generate a sense of identity that transcends distinction between EU, Europe, or national identity thus drawing on collective identity especially to reinforce authority in technology and industry generating the impression of a knowledge-based society. European space industries are both related to common values such as the open-market, democratic ideals, and shared cultural heritage as well as power struggles between Europeanisation and national sovereignty (Patarin-Jossec, 2020:258-260). EU space policy is rapidly developing with dominant emphasis on security alongside market access for private actors as well as in third countries and development of the space industry which incorporates research and innovation. The analysis thereby indicates an understanding that leadership and cohesion of European space strategies is underpinned by science and industry whilst global actorness and internal objectives are understood as mutually enforcing, complemented by an integrated approach to space consistent throughout discourse.

This shows how the EU is not only seeking to develop power as influence on global structures and institutions, but also over internal constituents to facilitate this. It effectively navigates competence-distribution and differentiation between the EU and ESA, alongside national sovereignty and identity potentially affecting MS' preferences, including military and foreign

policy preferences. Discourse increasingly indicates intention of a legislative push on regulation. Opinions on Commission Communications are supportive of this but suggest increased consideration of the UN framework, implementation of fundamental rights and empowerment of civil society. Regulation is attributed latent meaning as reducing uncertainty and risk in space policymaking and would in turn enhance cooperation with MS in international forums as well as coherence. Analytical findings suggest belief that internal regulation extends to the global sphere and contributes to global common interest (Bradford, 2020:24). Space is perceived as a domain and enabler for global action as well as a justification for expanding capability and integration. As such, the analysis shows how space promotes both actorness and power.

Proposal of regulations such as space law has significant implications for capability and the steering of European space policy, with consequences for the EU as a global space actor and its approach to global space governance. EU space law could promote development of an EU definition for the boundary between Earth's atmosphere and space (section 1.2, 2.4). This may affect future efforts to achieve consensus within global governance through presence. Space law has not been formally proposed but is a key priority for the Commission in 2024 (European Commission, 2023a). It would require a definitive stance on formal acceptance of ARA, LC, and RC. EU Space Law is envisioned to regulate EU and MS space activities, addressing safety and resilience; industrial competitiveness; research; and sustainability through STM, infrastructure and asset protection, standardisation, debris removal, life-cycles of infrastructure and environmental impact assessments. Measures are envisioned to apply to public and commercial assets of the EU and MS (European Commission, 2023c). External context, perceptions of geopolitical tensions and increasing space commercialisation thus present an opportunity for internal development which enhances capability as a global actor. This in turn affects the EU's positioning as an international actor.

ESA arguably represents Europe's biggest space asset (Davis Cross, 2021a:46). The EU can take advantage of Europe's fragmented space landscape by drawing on ESA's experience in space activities to establish authority and legitimacy, thereby reinforcing credibility as a space actor actively contributing to space governance. The European space landscape and its corresponding need to achieve consensus is considered to facilitate reliable and successful implementation of programmes and policies (Schrogl and Giannopapa, 2020:52). The EU can use this to the benefit of European identity construction as well as construction as a global actor (Gaubert and Lebeau, 2009:43-44). Instead of negatively affecting presence by providing a confusingly wide

array of institutions others perceive as representing a European position, presence may be increased if coherence is maintained amongst European space institutions, which the EU strives to ensure based on analytical findings. This factors into representation of MS, the Commission, EUSPA, and ESA in multilateral forums for space governance and space diplomacy.

Through emphasis on security other issues are inconsistently qualified for consideration. Whilst space assets are frequently associated with climate change, the green transition, and strengthening the EU as an actor in the global climate change regime, sustainability such as reducing pollution during launches and re-entry phases of operations are rarely qualified for consideration within discourse. This may undermine coherence and legitimacy. However, such factors are progressively recognised from 2021 onwards as synergies between policy areas are considered in terms of strengthening the EU as a global actor and stimulating economic growth. These factors are in accordance with constitutional principles, therefore there is still unrealised potential in connection to the EU's normative international identity and the internal construction of the EU as a space actor, reinforcing its projection as a global actor.

Although security-based argumentation is effective based on the development thereof within discourse in comparison to the expansion of space capability, this limits the EU's approach to outer space. For instance, space exploration is identified as an opportunity to enhance European cooperation and coordination with a political dimension and potential to contribute to energy and health technologies in 2011 (COM/2011/152:7), however it is absent in discourse thereafter. This corresponds with membership in multilateral institutions, where EUSPA is not a member of ISECG (section 5.2). This could be attributed to the scientific-political division within the European spacescape (section 5.1). Space exploration may be perceived as a scientific endeavour under purview of ESA; however, it could equally be argued to stimulate technological innovation and development thereby enhancing competitiveness (Budd and Paladini, 2023). Admittedly the analytical framework does not permit a definitive conclusion on this matter, but this may indicate limitations on global space actorness generated by internal discursive construction. In terms of developing global space governance, exploration is linked to space sustainability and resources. Space sustainability has recently become considered for qualification in EU initiatives (e.g. Regulation 2023/588:para.28,Art.8) and is thus set to develop further in future, but discourse does not address space mining.

Technological development is rapidly approaching realisation of space mining alongside the growing commercialisation of space; some actors such as the USA, UAE, Japan, and

Luxemburg already have legislation on space mining in place (Osada, 2022). Luxemburg's ispace Europe has agreed to sell a moon soil sample to NASA, setting a precedent for commercial rights of ownership to space resources (U.S. Mission Luxembourg, 2020) given the development of instant custom in space (section 2.3). Such activities contribute to global governance debates on the principles of non-appropriation, sustainable use and common benefit, providing impetus for further development of space law (Xu et al., 2020) and presenting an opportunity for the EU as examined in section 5.3.4.

As the case of Luxemburg shows, some MS already have legislation on space mining in place. Although harmonisation is prevented by the treaties, parallel competence does not exclude exercise of EU competence, provided it does not prevent MS from exercising theirs (section 1.1). Although beyond the delimitation of this dissertation, it should be noted here that the treaty-basis for space-competence has been identified as problematic for development of EU space policy (e.g. Barbano, 2022:455; Sandulli, 2023; Cellerino, 2023). As noted in section 2.4 access to and exploitation of resources such as rare minerals in space may provide strategic, political, or economic advantages by creating a monopoly or distorting competition in favour of actors who possess these. Space mining may therefore become an internal concern for the EU in future, affecting competition rules necessary for functioning of the internal market or the common commercial policy and trade. It could affect global competitiveness of the European industry, economic non-dependence, as well as sustainability.

As an actor learning to speak the language of power in space, the EU engages in its own form of projecting space power. It demonstrates capacity to project power in discourse through formulations of world class space systems and presentation as a world leader in the space industry, avoiding direct formulation of challenges such as launch-autonomy, cost-effective launchers, or competitiveness (section 5.3.3). There is inconsistency in self-perception as a space power throughout discourse regardless of development of capability and autonomy as a space actor. Some documents explicitly refer to Europe as a space power (JOIN/2023/9:1), others do so indirectly (COM/2011/152:9), others refrain from it (COM/2010/614:24), and some refer to the EU as a spacefaring actor (JOIN/2022/4:1). When self-perception as a space power is expressed, this consistently refers to Europe, and not the EU as a separate entity, echoing the blurred distinction between 'European' and 'EU' addressed in analysis, despite growing differentiation between EU and ESA and autonomy of the EU as a space actor. This can be related back to the discussion of identity above.

The EU seeks to affect global structures by shaping the international environment through incentives such as the proposal of a code of conduct at the UN and the objective of developing a global STM framework. These initiatives in turn are argued to support security. Corresponding with a shift in discourse (section 5.3.2), the EU is geopolitical in outer space by considering others' hard power and seeking to deter this. This does not amount to coercion or projecting hard power itself but rather by shaping spatial ordering principles through trade and international normative frameworks, often based on diffusion. This is facilitated by capacity to use economic and political policy instruments, including bilateral agreements with third countries or space dialogues by EEAS, expanded by EUSPA in 2021 (Regulation 2021/696:Art.98.3).

The USA is consistently directly referenced as a partner, whereas engagement with other space actors is referred to in collective terms such as third countries, actors with interest in space, spacefaring nations and space powers. Exceptions to this pattern are mention of Japan, Canada, and Norway in the Space Strategy for Security and Defence (JOIN/2023/9:16), China, and Russia. China and Russia are first addressed as space powers to cooperate with (COM/2011/152:10) but following the shift described in section 5.3.2 are explicitly referenced in connection to potential threats or competition (JOIN/2023/9:1). Whilst the USA is an advanced actor in space, particularly in SST and STM, and often plays a key role in global space governance negotiations (Stroikos, 2022); this feature of discourse ultimately reinforces geopolitical alignments and competitive dynamics in the domain. It may contradict efforts to prevent an arms race in outer space, undermining the perceived purpose of space governance (section 5.3.4).

It must be reiterated that these phenomena are subtle in relation to the overall content and meaning within analysed discourses. They are addressed here as they contribute to the dissertation's evaluation of how the EU's approach to space governance incorporates power-considerations and on the effects of analysed discourse. Similar studies have concluded that the EU is not geopolitical in outer space, however these conclusions are based on a traditional conception of geopolitics and realist notions of power-balancing (Riddervold, 2023). The dissertation identifies an EU-specific form of being geopolitical that employs resources and strategies characteristic of the Union through normative and economic means rather than hard compulsory power. As conceptualised in section 2.4.1, the EU projects power, considers others projecting or using hard power, and seeks to deter this. It is thus not geopolitical in a traditional sense, but geopolitical perceptions justify policy in terms of influence and power.

Through the approach to space governance identified in analysis, the EU reproduces global ordering principles for outer space such as the association of space with sovereignty. Power competition dynamics in the domain are thereby sustained, even with emphasis on cooperation. This reinforces the performative aspect of space power as actors may seek to demonstrate autonomous space capability, military or otherwise, and are unwilling to concede limitations of sovereignty (Doucet, 2022:224-225). Thus, the root problem of contestation, competition and geopoliticisation in outer space as a global commons is not resolved on a global structural level. It is not the task of this dissertation to comment on whether this is beneficial or problematic for global common interest, the EU, or its MS and citizens however it should be pointed out that awareness of and ability to engage with power dynamics in a highly strategic domain may facilitate capacity to control one's fate.

As a counterpoint, by virtue of presence the EU may demonstrate the benefit of cooperation and concessions of sovereignty. Fragmentation such as in the European space landscape can also be observed in global space governance with UNOOSA, UNCOPUOS, UNGA and its Disarmament and International Security Committee and Special Political and Decolonization Committee at the highest level within the UN framework alone. As noted in section 1 and illustrated in 5.2, space governance extends beyond these to organizations, actors, instruments, mechanisms, and norms that are at times contradictory (Jakhu and Pelton, 2017:51). Therefore, the European experience of governing a fragmented landscape of preferences, capabilities, understandings, and authority may influence global governance virtue of presence, if navigated effectively. This notion is echoed in consideration of the growing relevance of non-state actors and commercial activity in outer space. EU engagement with NewSpace may not only be beneficial for the European space industry and market but generate customary practise in approaches to commercial space actors. Therefore, through presence the collective benefit of cooperation could prompt true development and progress within the space regime.

An example of cooperative dynamics in space that transcend geopolitics is the ISS, founded by 10 ESA MS, Canada, Japan, Brazil, USA, and Russia. Heralded a success of peaceful cooperation among space powers, even throughout the onset of Russia's invasion of Ukraine (Yamazaki, 2023:458), the ISS contributes to national prestige with astronauts operating under their national flag supporting a symbolic function but serves a common, truly international endeavour (Patarin-Jossec, 2020:264; Davis Cross, 2024:162-163,170-171). In 2016 ESA suggested the concept of a moon village as an open platform for diverse actors' self-determined participation, a similarly cooperative undertaking that complements commercialisation of

space (Köpping Athanasopoulos, 2019). Such an endeavour need not be purely scientific but has economic and political potential as well. EU-engagement therein would not only benefit from its pre-established relationship with ESA but also enhance legitimacy and authority. The EU thus already has available opportunities to engage with and promote global cooperative dynamics as well as progress in the domain.

Perception of space as a congested, contested, and competitive domain has become a common understanding in global politics (Steer and Hersch, 2021:302-303). As elaborated in section 2.4 such perceptions inform an actor's approach to the domain. Through its geopolitical awakening and learning to speak the language of power, the internal construction of the EU as a space actor in analysed discourse reproduces this conception of space dynamics. This shows how the internal construction of the EU as a space actor has consequence not only for its approach to outer space governance, but possibly for space governance itself. It in keeping with recent efforts to effectively link internal and external aspects of EU policies, enhancing external action, and dedicating attention to geopolitical developments in the world to promote autonomy and a globally assertive EU (Zwolski, 2024:95-96).

7. Conclusion: Research Scope and Empirical Field of Space

To conclude, it should be reflected that this dissertation was guided by the research question: *How does the internal discursive construction of the European Union as a space actor shape its approach to global space governance and how does this incorporate power-considerations?* Hence, its findings are limited to the internal discursive construction determined by selection of material such as legislation and communications amongst EU bodies. The analytical inclusion of power-considerations produces an emphasis on how power relations manifest in aspects of practising geopolitics. Findings suggest that research engaging external action may find evidence supporting an approach to governance that stresses cooperation, collaboration, and communication through transparency, diplomacy, and engaging key space actors such as the USA. These factors counter the challenges produced by understandings of space as congested, contested, and competitive (Steer and Hersch, 2021). Analysis indicates that in its external engagement the construction of the EU as a space actor corresponds with its normative role, maintaining credibility and legitimacy. This claim is reliant upon examination of bilateral agreements and partnerships incorporating EU space programmes, which form an intriguing landscape for future research and diversify actor-involvement beyond the scope of this dissertation.

Official documents are a distinct presentation of perceptions, forming their own version of reality according to the context in which they are produced by and for whom. They convey an impression favourable to authors and those they represent and are likely produced in apprehension of scrutiny (Bryman, 2012:554-555). Official documents do not establish a holistic assessment of the EU as a space actor, even when context is taken into consideration. Documents analysed in this dissertation establish a euro-centric perspective which emphasises security and economy related to the internal discursive construction of the EU as a space actor. If the scope were expanded to regional or local level to consider external applications of EU space programmes it would reveal the objective of comprehensive involvement in SDG-activity, addressing economic, environmental, and social challenges (UNOOSA, 2023b:37-81). This resonates with the normative basis of the EU in global affairs (section 1). Promotion of space programme commercialisation is not only based on power-considerations and preference-pursuit, as some services are free such as access to Copernicus data, but also contributes to adherence to and promotion of constitutional principles and foreign policy

objectives. How security-focused discourse interacts with this dimension of actorness remains to be assessed.

The dissertation provides a broad assessment of internal discursive construction of the EU as a space actor and its approach to global space governance. It provides insight into how power-considerations and perceptions inform EU policy. Nonetheless, throughout the process of conducting research it became evident that such a diversified field benefits from a narrow scope, placed on an individual sector, policy or issue area, or specific EU body. This permits closer examination of the many actors, decision-making, argumentation, and socialisation processes involved. A detailed study would benefit from consideration of MS' space policies, strategies, and programmes as well as contributions to space governance. Furthermore, as space is often linked to the military domain where EU competence is limited, inclusion of MS would provide more comprehensive findings. This would enable research to address socialisation processes for diffusion in global governance or examine Europeanisation of space policy which is relevant for actorness as tensions between bodies such as the Commission and MS diminish coherence and effectiveness (Bretherton and Vogler, 2002:2).

Constructivist ontology and epistemology requires reflexivity concerning interpretation and bias, not only in conducting research but also in how the research premise and design is developed. Foremost, ontology informs the research premise in addressing co-constitution of structure and agency and intersubjective construction. Global commons are considered as socially constructed with material and behavioural effects (Vogler, 2012; Davis Cross, 2021b). The dissertation builds upon the assumption of a multilateral global order and accepts outer space as global commons, based on understandings of the OST declaring it a province for all humankind whose use and exploitation is to benefit all. This is the predominant shared understanding reinforced by principles of space law, the UN, international actors, and academic literature. Other understandings are possible and increasing related to the rising commercialisation of space (Goehring, 2021).

The dissertation accepts the notion of the EU's identity based on the constitutional charter of the Union endorsed by EU bodies and MS. Legitimacy and internal consistency therein are beyond the scope of the dissertation, echoing the conclusion above that a narrower scope would permit closer inspection of internal dynamics. Analysis initially incorporated an evaluation of logic of action to determine the EU's rationale for action in its approach to space governance (March and Olsen, 1998) as well as rhetorical action (Schimmelfennig, 2001). However,

acceptance of the EU's identity as normative based on constitutional principles and incorporation of logics of action generated potential bias for interpretive assessments when evaluating whether a normative basis provided prescription for action as values and principles are rarely mentioned in material selected for analysis. Based on the theoretical approach this could either be allocated to internalisation, where norms are so accepted they need not be mentioned, or to logic of consequence.

This element of analysis was therefore discarded, and the analytical framework amended but retained capacity to address instances of normative argumentation, which proved to be absent from the majority of analysed documents, as were expressions of identity in relation to constitutional principles. This may be avoided by selection of other types of discourse, such as speeches which are formulated with others in mind as an audience which elicits clearer justification for action. Limitation of selected material to official documents establishing EU capability as a space actor published in the Official Journal of the EU and Communications entails to the exclusion of highly relevant discourse that provides priorities and strategies for space matters such as the Global Strategy and Strategic Compass. This notion extends to Council Conclusions, many of which address space (European Council, 2024), Resolutions and Conclusions of the Space Council published by the ESA including its 2016 landmark resolution "Towards Space 4.0 for a United Space in Europe" (Bohlmann, 2020), as well as the European Parliament's support for space policy development (Sigalas, 2012).

As the analytical framework is designed to address stable meanings related to actorness and global space governance, interpret perceptions of power and how these inform discourse represented in official documents, it analyses focal points within discourse. This means that findings including omissions, assumptions, ambiguities, and latent meaning are directly coupled to the meanings of texts and context. This is useful to establish the EU's perspective, justified within the scope and research premise of the dissertation. However, it restricts ability to address underlying constitutive practises related to gender, socio-economic power structures and imperialist patterns. If or how the EU reproduces colonial or imperialist patterns is not considered by the dissertation but presents an intriguing premise for critical discourse analysis. Consideration of power and discourse is evidently highly relevant for such issue-areas and although they are not incorporated into the scope of the dissertation, it should be noted here that similar approaches to the same empirical field may seek to problematise these.

The premise of co-constitution of structure and agency is well-illustrated within outer space. Pragmatic limitations require a well-founded scope to be established to ensure that the interplay of structure and agency, ideas and material factors, different capabilities and preferences at various levels are attributed their share of analytical attention. This notion may evidently be transferred to all social science endeavours; however, it becomes particularly relevant for research on the EU and outer space. As European space policy is differentiated and diffuse, rapidly evolving in continuous development, reliance upon literature becomes problematic as empirical context and structures may have changed since publication of a study. Research must therefore be conducted in a largely self-reliant manner and existing literature needs to be assessed in its context at the time of writing to establish the contemporary validity and explanatory relevance of findings. Conducting research on the EU and outer space may thus form a useful exercise for realising the significance of scope and delimitation of a research design, as well as the inability of research to capture all aspects of social phenomena.

Constructivist epistemology purports that through systematic study pragmatic claims can be made on the social construction of the world. This dissertation concludes that systematic study and pragmatic considerations are particularly relevant for conducting social-scientific research on outer space. Whilst it has provided useful insights on the construction and positioning of the EU as an international actor, these insights would be more nuanced in a scope that is narrowed down further to address one specific component of actorness, policy or issue area. Nonetheless, the following conclusion can be formulated in confidence: Outer space is growing in significance for the construction and positioning of the EU as a global actor.

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¹ The original speech by Elżbieta Bienkowska is no longer available on the European Commission's website at <https://commissioners.ec.europa.eu/2014-2019/bienkowska/announcements/11th-annual-conference-european-space-policy-opening-speech_en> (last accessed 29/03/2024), however the contents have been verified by comparison of several news outlets and thinktanks.

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- UNGA United Nations General Assembly (12 December 2022); Resolution adopted by the General Assembly on 7 December 2022; A/RES/77/41; available from <<https://digitallibrary.un.org/record/3997622?ln=en&v=pdf>>; last accessed 17/05/2024

UNGA United Nations General Assembly (25 October 2021); Resolution adopted by the General Assembly on 25 October 2021; A/RES/76/3; available from <https://documents.un.org/doc/undoc/gen/n21/307/31/pdf/n2130731.pdf?token=gBIgO9DTV5aJjHrkaV&fe=true>; last accessed 18/05/2024

UNGA United Nations General Assembly (26 October 2018); Resolution adopted by the General Assembly on 26 October 2018; A/RES/73/6; available from <https://documents.un.org/doc/undoc/gen/n18/343/85/pdf/n1834385.pdf?token=kdHVznUgu aHWLNcbzQ&fe=true>; last accessed 18/05/2024

UNODA United Nations Office for Disarmament Affairs (2023); EU Joint Contribution to the Report of the UN Secretary-General Following the UNGA Resolution 77/251 on “Transparency and Confidence-Building Measures in Outer Space”; available from [https://docs-library.unoda.org/General_Assembly_First_Committee_-_Seventy-Eighth_session_\(2023\)/77-251-EU-EN.pdf](https://docs-library.unoda.org/General_Assembly_First_Committee_-_Seventy-Eighth_session_(2023)/77-251-EU-EN.pdf); last accessed 24/04/2024

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Appendix I: Material Selection

Communications from the Commission and High Representative of the Union for Foreign Affairs and Security Policy are accessed via EUR-Lex (see section 3.3). Excluding Communications, all material is published in the Official Journal of the European Union's L- and C- Series. All material is published in the timeframe from 1 December 2009 to 31 December 2023. Amendments to Regulations, Resolutions, and Decisions have been reviewed as well but are excluded from this list in the interest of brevity. Opinions issued on Communications have also been taken into consideration but are listed only if utilised as material for analysis.

Material reviewed to establish capability as a space actor:

- Opinion of the European Economic and Social Committee on the 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Global Monitoring for Environment and Security (GMES): Challenges and Next Steps for the Space Component' COM(2009) 589 (2011/C 44/26) [2011] OJ C44/153
- Communication from the Commission - Europe 2020: A strategy for smart, sustainable and inclusive growth COM(2010) 2020
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - An Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage COM(2010) 614
- Regulation (EU) No 911/2010 of the European Parliament and of the Council of 22 September 2010 on the European Earth monitoring programme (GMES) and its initial operations (2011 to 2013) Text with EEA relevance [2010] OJ L276/1
- Regulation (EU) No 912/2010 of the European Parliament and of the Council of 22 September 2010 setting up the European GNSS Agency, repealing Council Regulation (EC) No 1321/2004 on the establishment of structures for the management of the European satellite radio navigation programmes and amending Regulation (EC) No 683/2008 of the European Parliament and of the Council [2010] OJ L276/11
- Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions -

Towards a Space Strategy for The European Union that Benefits its Citizens
COM(2011) 152

- Decision No 1104/2011/EU of the European Parliament and of the Council of 25 October 2011 on the rules for access to the public regulated service provided by the global navigation satellite system established under the Galileo programme [2011] OJ L287/1
- Council Resolution of 6 December 2011 ‘Orientations concerning added value and benefits of space for the security of European citizens’ 2011/C 377/01 [2011] OJ C377/1
- Council Decision 2012/281/CFSP of 29 May 2012 in the framework of the European Security Strategy in support of the Union proposal for an international Code of Conduct on outer-space activities [2012] OJ L140/68
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - EU Space Industrial Policy Releasing the Potential for Economic Growth in the Space Sector COM(2013) 108
- European Parliament Resolution of 10 December 2013 on EU Space Industrial Policy, releasing the Potential for Growth in the Space Sector (2013/2092(INI)) [2016] OJ C468/12
- Regulation (EU) No 1285/2013 of the European Parliament and of the Council of 11 December 2013 on the implementation and exploitation of European satellite navigation systems and repealing Council Regulation (EC) No 876/2002 and Regulation (EC) No 683/2008 of the European Parliament and of the Council [2013] OJ L347/1
- Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) and repealing Decision No 1982/2006/EC Text with EEA relevance [2013] OJ L347/104
- Regulation (EU) No 377/2014 of the European Parliament and of the Council of 3 April 2014 establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010 [2014] OJ L122/44
- Regulation (EU) No 512/2014 of the European Parliament and of the Council of 16 April 2014 amending Regulation (EU) No 912/2010 setting up the European GNSS Agency [2014] OJ L150/72

- Decision No 541/2014/EU of the European Parliament and of the Council of 16 April 2014 establishing a Framework for Space Surveillance and Tracking Support [2014] OJ L158/227
- Council Decision 2014/496/CFSP of 22 July 2014 on aspects of the deployment, operation and use of the European Global Navigation Satellite System affecting the security of the European Union and repealing Joint Action 2004/552/CFSP [2014] OJ L219/53
- Council Decision (CFSP) 2015/203 of 9 February 2015 in support of the Union Proposal for an International Code of Conduct for Outer-Space Activities as a Contribution to Transparency and Confidence-Building Measures in Outer-Space Activities [2015] OJ L33/38
- European Parliament Resolution of 8 June 2016 on space market uptake (2016/2731(RSP)) [2018] OJ C86/95
- European Parliament Resolution of 8 June 2016 on Space Capabilities for European Security and Defence (2015/2276(INI)) [2018] OJ C86/84
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Space Strategy for Europe COM(2016) 705
- Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions - European Defence Action Plan COM(2016) 950
- Council Decision (CFSP) 2017/2370 of 18 December 2017 in support of the Hague Code of Conduct and ballistic missile non-proliferation in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction [2017] OJ L337/28
- Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions - A New Industrial Strategy for Europe COM(2020) 102
- Joint Communication to the European Parliament and the Council on strengthening the EU's contribution to rules-based multilateralism JOIN(2021) 3
- Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the

Committee of the Regions - Action Plan on synergies between civil, defence and space industries COM(2021) 70

- Regulation (EU) 2021/696 of the European Parliament and of the Council 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 [2021] OJ L170/69
- Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013 (Text with EEA relevance) [2021] OJ L170/1
- Council Decision (CFSP) 2021/698 of 30 April 2021 on the security of systems and services deployed, operated and used under the Union Space Programme which may affect the security of the Union, and repealing Decision 2014/496/CFSP [2021] OJ L170/178
- Regulation (EU) 2021/821 of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items (recast) [2021] OJ L206/1
- Joint Communication to the European Parliament and the Council - An EU Approach for Space Traffic Management: An EU contribution addressing a global challenge JOIN(2022) 4
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Commission contribution to European defence COM(2022) 60
- Communication from the Commission to the European Parliament and the Council - 2022 Strategic Foresight Report: Twinning the green and digital transitions in the new geopolitical context COM(2022) 289
- European Parliament Resolution of 6 July 2022 on the EU and the defence of multilateralism (2020/2114(INI)) [2023] OJ C47/130
- European Parliament resolution of 6 October 2022 on an EU approach for space traffic management — an EU contribution addressing a global challenge (2022/2641(RSP)) [2023] OJ C132/103

- Directive (EU) 2022/2557 of the European Parliament and of the Council of 14 December 2022 on the resilience of critical entities and repealing Council Directive 2008/114/EC (Text with EEA relevance) [2022] OJ L333/164
- Joint Communication to the European Parliament and the Council - European Union Space Strategy for Security and Defence JOIN(2023) 9
- Regulation (EU) 2023/588 of the European Parliament and of the Council of 15 March 2023 establishing the Union Secure Connectivity Programme for the period 2023-2027 [2023] OJ L79/1

Appendix II: Analysed Material

Material for analysis has been selected based on substantial reference to or implications for international relations due to the dissertation's objective of relating internal discourse constructing the EU as a space actor to its approach to global space governance. Previous and subsequent documents such as proposals for legislation, opinions or amendments are incorporated into analysis where relevant.

1. **2011/C/44/26**

Opinion of the European Economic and Social Committee on the 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Global Monitoring for Environment and Security (GMES): Challenges and Next Steps for the Space Component' COM(2009) 589 (2011/C 44/26) [2011] OJ C44/153

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52010AE0963>> [last accessed 13/04/2024]

Date of document: 14/07/2010

Author: European Economic and Social Committee

Form: Opinion - Document 52010AE0963

Policy Area: Industrial Policy, Internal Market, Research and Technological Development, Environment

No longer in force, Date of end of validity: 31/12/2013, Repealed by Regulation 377/2014

Content and Meaning: Comments and recommendations on the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Global Monitoring for Environment and Security (GMES): Challenges and Next Steps for the Space Component COM(2009) 589. The Communication is issued outside the timeframe for the dissertation. This document is selected to provide context for Regulation 911/2010, which builds on the Communication.

2. **Regulation 911/2010**

Regulation (EU) No 911/2010 of the European Parliament and of the Council of 22 September 2010 on the European Earth monitoring programme (GMES) and its initial operations (2011 to 2013) Text with EEA relevance [2010] OJ L276/1

available from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2010.276.01.0001.01.ENG> [last accessed 04/04/2024]

Date of document: 22/09/2010

Date of effect: 09/11/2010

No longer in force, Date of end of validity: 31/12/2013; Repealed by Regulation 377/2014

Author: European Parliament, Council of the European Union

Form: Regulation - Document 32010R0911

Policy Area: Environment, Space Policy, Security Services

Content and Meaning: Establishes the GMES (Global Monitoring for Environment and Security) programme, its budget, rules and initial operations for the period 2011-2013. GMES is based on a partnership between the EU, ESA and MS, supporting objectives outlined in Article 189(1),(2) TFEU. The GMES operational programme builds on the GMES Space Component Programme of the ESA.

3. **COM/2010/614**

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - An Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage COM(2010) 614

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52010DC0614>> [last accessed 13/04/2024]

Date of document: 28/10/2010

Author: European Commission

Form: Communication - Document 52010DC0614

Subsequent related instruments: COR Opinion 2012/C 9/07 [2012] OJ C9/29, ESC Opinion 2011/C 218/07 [2011] OJ C218/38

Policy Area: Industrial Policy, Single Market, Competition

Content and Meaning: A strategic framework for an integrated industrial policy focusing on long-term structural challenges, particularly maintaining global competitiveness, climate change, energy, population ageing, skills and knowledge. The space manufacturing industry is allocated an individual section in the document.

4. **COM/2011/152**

Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Towards a Space Strategy for The European Union that Benefits its Citizens
COM(2011) 152

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0152>> [last accessed 12/04/2024]

Date of document: 04/04/2011

Author: European Commission

Form: Communication - Document 52011DC0152

Subsequent related instruments: ESC Opinion 2012/C 43/05 [2012] OJ C43/20, COR Opinion 2012/C 54/06 [2012] OJ C54/28

Policy Area: Industrial Policy, Single Market, Space Policy, Research and Technological Development

Content and Meaning: A European Space Strategy defining the legal, economic, strategic, and social context for European space policy and outlining the EU component of priorities determined by the Space Council (Council of the EU and Council of the ESA at ministerial level) and Article 189 TFEU, aimed at achieving the objectives of promoting technological and scientific progress; stimulating industrial innovation and competitiveness; enabling European citizens to benefit from space applications; and raising Europe's international profile on outer space.

5. **Decision 2012/281/CFSP**

Council Decision 2012/281/CFSP of 29 May 2012 in the framework of the European Security Strategy in support of the Union proposal for an international Code of Conduct on outer-space activities [2012] OJ L140/68

available from <[https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012D0281\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012D0281(01))> [last accessed 12/04/2024]

Date of document: 29/05/2012

Author: Council of the European Union

Form: Decision - Document 32012D0281(01)

Modified by: Decision 2014/42/CFSP [2014] OJ L26/42

Policy Area: Common Foreign and Security Policy

Content and Meaning: Determines objectives, actions, and funding for the EU to support its support its proposal for a voluntary international code of conduct on outer space activities, made in 2008 at the UN. Competence-distribution is relevant here based on article 26(2) TEU: “The Council shall frame the common foreign and security policy and take the decisions necessary for defining and implementing it on the basis of the general guidelines and strategic lines defined by the European Council”.

6. **Regulation 377/2014**

Regulation (EU) No 377/2014 of the European Parliament and of the Council of 3 April 2014 establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010 [2014] OJ L122/44

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014R0377&qid=1713004163708>> [last accessed 04/04/2024]

Date of document: 03/04/2014

Date of effect: 25/01/2014

Author: European Parliament, Council of the European Union, Responsible body: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs,

Directorate-General for Research and Innovation

Form: Regulation - Document 32014R0377

Policy Area: Industrial Policy, Internal Market, Environment, Public Safety

No longer in force, Date of end of validity: 31/12/2020, Repealed by Regulation 2021/696

Content and Meaning: Establishes the Copernicus programme based on Article 189(2) TFEU, its budget and work programme. It builds upon the GMES programme and is a civil programme lead by the Commission in partnership with ESA and the European Environment Agency.

7. **Decision 541/2014/EU**

Decision No 541/2014/EU of the European Parliament and of the Council of 16 April 2014 establishing a Framework for Space Surveillance and Tracking Support [2014] OJ L158/227

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014D0541>> [last accessed 13/04/2024]

Date of document: 16/04/2014

Date of effect: 16/06/2014

Author: European Parliament, Council of the European Union

Form: Decision - Document 32014D0541

Policy Area: Industrial Policy, Internal Market, Research and Technological Development

No longer in force, Date of end of validity: 31/12/2020; Repealed by Regulation 2021/696

Content and Meaning: Establishes a framework for Space Surveillance and Tracking Support (SST) with the objective of protecting satellites from space debris to support development of a European SST service for public, commercial, civilian, and military users, based on Article 189(2) TFEU. It notes there is no such capability at European level; satellite and launch operators are dependent on US data for collision alerts.

8. **Decision 2015/203/CFSP**

Council Decision (CFSP) 2015/203 of 9 February 2015 in support of the Union Proposal for an International Code of Conduct for Outer-Space Activities as a Contribution to Transparency and Confidence-Building Measures in Outer-Space Activities [2015] OJ L33/38

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015D0203>> [last accessed 12/04/2024]

Date of document: 09/02/2015

Author: Council of the European Union

Form: Decision - Document 32015D0203

Policy Area: Common Foreign and Security Policy

Content and Meaning: Determines objectives, actions, and funding for the EU to support its proposal for an international code of conduct on outer space activities, commenting on progress made and forming a continuation of 2012/281/CFSP, based on Article 26(2) TEU.

9. **2015/2276(INI)**

European Parliament Resolution of 8 June 2016 on Space Capabilities for European Security and Defence (2015/2276(INI)) [2018] OJ C86/84

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016IP0267>> [last accessed 12/04/2024]

Date of document: 08/06/2016

Author: European Parliament, Committee on Foreign Affairs, Committee on Industry, Research and Energy

Form: Own-initiative resolution - Document 52016IP0267

Policy Area: Common Foreign and Security Policy

Content and Meaning: Considerations and recommendations on the use of space capabilities for security and defence, particularly for consideration in the development of the Global Strategy on Foreign and Security Policy.

10. COM/2016/705

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Space Strategy for Europe COM(2016) 705

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016DC0705&qid=1712907917287>> [last accessed 03/04/2024]

Date of document: 26/10/2016

Author: European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Responsible body: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, GROW

Form: Communication - Document 52016DC0705

Subsequent related instruments: ESC Opinion 2017/C 209/03 [2017] OJ C209/15, COR Opinion 2018/C 054/12 [2018] OJ C54/66

Policy Area: Industrial Policy, Research and Technological Development, Space Policy

Content and Meaning: Outlines a space strategy for Europe building on Article 189 TFEU with the objectives of maximising benefits for society and economy; fostering innovation and competitiveness; reinforcing autonomous access and use of space as a safe environment; and strengthening Europe's role as a global actor and promoting international cooperation.

11. Regulation 2021/696

Regulation (EU) 2021/696 of the European Parliament and of the Council 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 [2021] OJ L170/69

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0696&qid=1713014268416>> [last accessed 04/04/2024]

Date of document: 28/04/2021

Date of effect: 12/05/2021

Author: European Parliament, Council of the European Union

Form: Regulation - Document 32021R0696

Policy Area: Industrial Policy, Internal Market, Research and Technological Development, Space Policy

Content and Meaning: Establishes the EU Space programme and EUSPA based on Article 189(2) TFEU, budget and funding for the period 2021-2027 as well as rules for implementation and operation for EUSPA. The document re-iterates and re-structures programmes such as Galileo, EGNOS, Copernicus, SST, and GOVSATCOM.

12. **JOIN/2022/4**

Joint Communication to the European Parliament and the Council - An EU Approach for Space Traffic Management - An EU contribution addressing a global challenge
JOIN(2022) 4

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52022JC0004>> [last accessed 12/04/2024]

Date of document: 15/02/2022

Author: European Commission, Directorate-General for Defence Industry and Space,
Responsible body: DEFIS

Subsequent related instruments: ESC Opinion 2022/C 486/24 [2022] OJ C486/172,
EP Resolution 2023/C 132/14 [2023] OJ C132/103

Policy Area: Industrial Policy, Internal Market, Research and Technological Development, Space Policy

Content and Meaning: Outlines a coordinated EU approach to Space Traffic Management (STM) that is in accordance with competence-distribution, as well as its international promotion. The Communication presents a working definition for Space Traffic Management as the basis of EU-level actions.

13. **JOIN/2023/9**

Joint Communication to the European Parliament and the Council - European Union Space Strategy for Security and Defence JOIN(2023) 9

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023JC0009>> [last accessed 12/04/2024]

Date of document: 10/03/2023

Author: European Commission, Directorate-General for Defence Industry and Space,

Responsible body: Directorate-General for Defence Industry and Space

Form: Joint communication - Document 52023JC0009

Subsequent related instruments: ESC Opinion 2023/C 349/23 [2023] OJ C349/155

Policy Area: Common Foreign and Security Policy, Competitiveness, Space Policy

Content and Meaning: Outlines a strategy for enhancing resilience and protection of space systems and services in the EU, risk assessment and response capabilities, autonomy, and use of space for security and defence. Although the document references several EU space initiatives, no legal basis is explicitly mentioned.

14. **Regulation 2023/588**

Regulation (EU) 2023/588 of the European Parliament and of the Council of 15 March 2023 establishing the Union Secure Connectivity Programme for the period 2023-2027 [2023] OJ L79/1

available from <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023R0588>> [last accessed 12/04/2024]

Date of document: 15/03/2023

Date of effect: 20/03/2023

Author: European Parliament, Council of the European Union

Form: Regulation - Document 32023R0588

Policy Area: Industrial Policy, Internal Market, Research and Technological Development, Space Policy, Telecommunications, Security Services

Content and Meaning: Establishes the Union Secure Connectivity Programme, its

objectives, budget and funding for 2023-2027, as well as rules for implementation based on Article 189(2). The programme aims to provide worldwide access to secure governmental satellite communication services and provision of commercial services such as high-speed broadband and increased connectivity.