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Abstract

The present study proposes a theoretical framework of organisational rapprochement by examining the evolutionary relationship between two unique organisations within Europe: the European Space Agency (ESA) and the European Union (EU). The outer space sector in Europe is a highly fragmented field, with policy strategies implemented at many different levels. As such, this paper chooses to concentrate on the gradual “homogenisation” of European space policies. To explain the phenomenon of organisational rapprochement, this work builds on key inter-organisational relations theories as well as other theoretical concepts, including bureaucratic politics and organisational institutionalism. A multi-level framework of organisational rapprochement consisting of five ‘dimensions’ is then introduced in order to properly examine the relationship between the ESA and the EU. The results of applying this framework show that although many dimensions of rapprochement have already been met, others are still lacking. Whilst closer links between the ESA and the EU have increased considerably during the past years, there are still several obstacles that have hindered the complete unification of both organisations thus far.

Zusammenfassung

Die vorliegende Arbeit beleuchtet die Beziehung zwischen der Europäischen Union (EU) und der European Space Agency (ESA). Aufgrund ihrer zahlreichen Akteure kann die europäische Weltraumpolitik, die auf unterschiedlichen Ebenen stattfindet, als polymorph beschrieben werden. Diese Arbeit versucht die Tendenzen einer „Vereinheitlichung“ der europäischen Weltraumpolitik besser zu erfassen. Um die Beziehung sowie die sukzessive Annäherung der beiden Organisationen (ESA und EU) besser zu verstehen, legt diese Arbeit einen theoretischen Rahmen vor, der auf Theorien der interorganisationalen Beziehungen basierend Elemente der Bürokratiethorie und der institutionalistischen Organisationstheorie einbezieht. Unter dieser Voraussetzung soll anhand von fünf Dimensionen „Rapprochement“ qualitativ untersucht bzw. gemessen werden. Die Forschungsergebnisse deuten darauf hin, dass eine Annäherung zwischen ESA und EU bereits auf mehreren Ebenen stattgefunden hat. Allerdings lassen sich auch einige Schwierigkeiten erkennen, die eine konsequente Annäherung der beiden Organisationen bisher verhindert haben.

Table of Contents

1. Introduction.....	7
2. Literature Review.....	9
2.1. Inter-Organisational Relations.....	9
2.1.1. Collaboration, Alliances, and Partnerships	12
2.1.2. Concepts of Approximation, Convergence, and Mergers.....	15
2.2. Organisational Institutionalism	18
2.3. Bureaucratic Politics.....	19
2.4. Networks and Network Governance	20
2.5. The Concept of Social Relationship	21
3. A Theoretical Framework to Explain the Process of Organisational Rapprochement	23
4. Methodology	26
5. The Case of the ESA and the EU: From the Treaty of Rome to Treaty of Lisbon.....	28
5.1. EU Space Policy and Structure.....	30
5.2. The Role of National Space Programmes	31
5.3. European Defence Issues.....	32
5.4. European Space Industry	32
5.5. Development of the European Space Agency (ESA).....	33
6. Analysis: The EU-ESA Relationship – A Path towards Rapprochement?	35
Dimension 1: Common Goals and Values	35
Dimension 2: Legal Framework and Instruments.....	38
Dimension 3: Capacity-Building and Knowledge-Sharing.....	42
Dimension 4: Communication	45
Dimension 5: Coordination and Joint Projects.....	46
7. Outlook	50
8. Conclusion	53
9. Bibliography	55

1. Introduction

“Europe can be and should be a space power”, declared Frederica Mogherini, the High Representative of the European Union, at the 9th Annual Conference on European Space Policy, 2017 in Brussels (Mogherini 2017). Although space represents only a small sector of activity in Europe, it is of vital strategic importance, contributing towards the formation of many EU policies, including the Common Security and Defence Policy (CSDP). Moreover, it provides new platforms and frameworks for European diplomacy (Venet 2012, 60). The need to develop the European space sector and to achieve a cohesive space policy has therefore been promoted on several occasions. However, the sector remains fragmented, and its organisational structure is characterised by decentralisation and redundancy of core competences across multiple levels: the supranational level (the EU), the intergovernmental level (ESA or EUMETSAT), the national level (national space programs), and the private level (emerging private actors). In alignment with the growing importance placed on creating synergies between the different organisations, policy-makers have initiated efforts to establish joint co-operation between different actors within the space sector. One prominent example is the enhanced cooperation between the European Space Agency (ESA) and the European Union (EU). Indeed, the relationship between ESA and the EU might be one of the most complex relationships within the European space sector itself, and has been the subject of increasing debate since the establishment of the European Strategy for Space, established in 2000. After a long period of divergence, the rapprochement of the ESA and the EU since the 1980’s culminated in the conclusion of a Framework Agreement, which entered into force in 2004, and the proclamation of a common European Space Policy in 2007.

This paper will examine how organisational rapprochement evolved between the ESA and the EU. In order to understand the driving factors for rapprochement between these organisations, the following question will be examined: what explains the evolution of organisational rapprochement? In addition, in order to analyse the nature of the relationship between the ESA and the EU, the following sub-questions will also be discussed: which elements have contributed to a convergence between ESA and the EU? And which elements have so far hindered the unification of the two institutions?

To address this issue, this paper builds on inter-organisational theory to present a multi-level theoretical framework that provides a deeper understanding of the driving factors behind organisational rapprochement. Drawing on the notion of ‘convergence’ by Holzscheiter et al. (2016), this paper will define organisational rapprochement as an

increase in ties and linkages on different levels that intensify the depth of a cooperative relationship between two or more organisational actors. The multi-level theoretical framework of organisational rapprochement will be applied to determine the evolving relationship between the ESA and the EU. By using multiple sources, the different dimensions of rapprochement will be analysed and presented.

This research makes several important contributions to the existing literature. Firstly, whilst inter-organisational relations theory offers different approaches to analyse concepts such as collaboration, partnership, and alliances (Tolbert & Zucker 1983, Powell et al. 2005, Lomi et al. 2010, Cropper & Palmer 2010), very little literature exists on merging processes (e.g. Dewey 1976), tendencies for convergence (e.g. Holzscheiter et al. 2012), and proximity (e.g. Hassen et al. 2012). The introduction of a multi-level theoretical framework of organisational rapprochement should therefore contribute to our understanding of a new form of convergence between different organisations. Second, this study is part of a broader effort to understand the complexities of European space policies. Although much of the current literature has focused on the technical issues raised by space programmes, as well as the joint co-operation projects of ESA and the EU (e.g. Creola 2001, Von der Dunk 2003, Hoerber 2009, Gaubert & Lebeau 2009, Foehlich 2010, Sigalas 2012), little attention has so far been drawn to its political dimensions and mutual agreements. This gap might be explained by the fact that space is still an emerging sector within Europe and its importance to other core areas like security and defence, has only been recently recognised. In addition, it represents a field where only a few experts remain comprehensively informed, as much of the data is not easily accessible to the public. This could partially be explained by the lack of dialogue between the “space community” and wider European societies (see Venet & Baranes 2012).

2. Literature Review

This section critically examines literature on inter-organisational relations. As inter-organisational relations theory draws on many different approaches and does not offer a ‘coherent framework’, I will also revisit some other classes of literature that are embodied in the ideas of inter-organisational relations, and that I consider as relevant for my framework, aimed at describing organisational rapprochement.

2.1. Inter-Organisational Relations

The term organisation reflects a broad concept with a great variety of definitions. This paper draws on the seminal work of Weber (1950, 151) who suggests that it can be considered “a system of continuous purposeful activity of a specific kind”.

The theory of inter-organisational relations (IOR) explains “relationships between and among” organisations (Cropper et al 2010, 4). These relations can be “direct, diffuse, or perhaps more often a combination of the two” (Lomi et al. 2010, 314). As such, the study of IOR concentrates on “character and pattern, origins, rationale, and consequences of such relationships” (Cropper et al. 2010, 4). The study of IOR comes with many different approaches and can be classified as “fragmented”, constituting an emerging field of research (Cropper et al. 2010, 8). Nevertheless, the general focus of most scholars when dealing with IOR rests on the “properties and overall pattern of relations between and among organizations that are pursuing a mutual interest while also remaining independent and autonomous thus retaining separate interests.” (Cropper et al. 2010, 9)

The origins of IOR can be found in earlier attempts to explain the nature and workings of organisation in the fields of economics and business studies, sociology, psychology, and political sciences (see for example Marshall (1970), Weber (1950), and Selznick (1947)). According to Cropper et al. (2010, 6) the first “cornerstone for the study of IOR” can be traced to the development of the general systems theory by von Bertalanffy and its application by Boulding (1956). In the 1960s, the works of Johnson et al. (1964) and Evan (1965) laid out a further basis for IOR research. It is important to notice that a “sensitivity” towards relationships between organisations came with the approach of understanding organisation as “open systems”, and a turn towards studying the impact of environments on organisations, as laid out by organisational institutionalism (e.g. Evan 1965, Aldrich 1976, DiMaggio & Powell 1983, Tolbert & Zucker 1983, Meyer & Rowan 1977). Evan (1965), for example, claims that dependency is “inherent in the relationship between any formal organization and its environment” (Evan 1965, B218). However, it

was only after international organisations and their sub-units were increasingly regarded as autonomous bureaucratic actors within academia that IOR became widespread in international relations theory in the course of the 1990s (Franke 2017).

Scholars using IOR predominantly concentrate on “horizontal linkages among organizations” (Scott & Meyer 1992, 131). This refers to linkages among organisations that are lacking “formal authority or fiscal control over one another” (Scott & Meyer 1992, 131). As such, most research has focused on linkages among organisations “within a delimited geographical area, such as an urban community” (Scott & Meyer 1992, 131).

Franke (2017) categorises different perspectives on IOR into five theoretical approaches: sociological neo-institutionalism, resource dependence, network accounts, regime complexity, and classical pragmatism. According to Franke, only the regime complexity approach can be traced back to political science in international relations. All other approaches have originated in the fields of economics, psychology and sociology. The resource dependence, network account, and regime complexity approaches can be understood as “rationalist accounts”. They treat organisations and their actors as “atoms”, surrounded by an environment which consists of other atoms (Franke 2017). In contrast, constructivist accounts consider the social context among organisations as given. Thus, relations with other organisations provide the conditions for “organisational self-constitution” (Franke 2017).

Sociological neo-institutionalism (also known as the “Stanford School approach” or as “organisational institutionalism”) (e.g. Selznick, March & Olsen) takes a broader view of how organisations are shaped and how they reflect social orders. Most of the theories associated with this approach draw on Max Weber’s concept of the power of bureaucracy and bureaucratization, and on his idea of a rationalisation of culture (Weber 1950). However, Weber’s notion has been modified in the sense that the homogenising effects of bureaucratisation are not primarily connected to “the need for efficiency” (DiMaggio & Powell 1983, 147), but also to “structural effects of the environment in which organizations operate” (Franke 2017).

The resource dependence approach is linked to the emergence of social exchange theory (Franke 2017). During the 1970s, scholars such as Aldrich (1976) and Cook (1977) coined the term “resource dependence”. According to this theory, the power of an organisation is linked to its scope of resources. Following this idea, organisations are confronted with at least two external constraints: an insecure environment, and a dependency on finite resources. Resource scarcity thus drives organisations towards

exchange and collaboration in order to survive. However, this also brings the risk of losing autonomy, which leads organisations to “strive for balanced exchange ratios and to maintain independence” (Pfeffer & Salancik 1978, 42). Thus, due to a need for more resources, organisations are dependent on their environment on one hand, whilst remaining autonomous on the other. This explains why organisations try to engage with each other (Franke 2017). Many arguments drawn from the resource dependence approach can be found in other theories, such as transaction cost economics, institutional theory, the network perspective, or perspectives on power (Cropper et al. 2010, 284).

In contrast, the network accounts approach originates in the field of social studies and psychology. Although network accounts arguments have been frequently criticized for not being based on theory at all (Franke 2017), they can nevertheless be found in many different theoretical frameworks, often combined with other theoretical approaches. Among key concepts are the “nodes, edges, size and density of a network structure, as well as (structural) positions” (Franke 2017). According to the concept of “nodes”, actors are linked to many other actors, enabling an analysis of “dynamic properties” of inter-organisational networks. This can imply phenomena such as change, shifts in alliances, the formation of mergers, the “rise and fall of competitive activity”, and the “instigation of regulatory practices” (Cook, 1977, 79).

The regime complexity approach, on the other hand, originates in the theory of regimes and the assumption that “principles, norms, rules, and decision-making procedures around which actor expectations converge in a given issue-area” (Krasner, 1982, 185). Regimes are seen as responsive to problems of coordination and collaboration, as well as to unilateral pursuits of interest in the international sphere. According to this approach, regimes are dynamic, governing the activity of their members. Therefore, inter-organisational relations in this context can contribute to the global world order “by intended and unintended effects of strategic state action” (Faude, 2015, 297). Thus, organisations are thought to both influence structures and be influenced by structures. Moreover, organisations are defined as actors (Franke 2017). The regime complexity analysis can also apply under the theoretical framework of “global governance” (Franke 2017). Other concepts which can be incorporated into this approach are “functional overlap, competition, adaptation, differentiation, and division of labor” (Franke 2017). However, according to Franke (2017), these concepts should only be viewed as “moments or phases” of the inter-organisational process.

Classical pragmatism focuses on the actions of humans and puts an emphasis on “what is believed to be true” (Franke 2017). Organisations as well as IORs are conceptualised as structures of corporate practice, which are at the same time constituted by them. These structures can also be understood as rules or routines (Franke 2017). According to this approach, human beings play a vital role, as they stand in a “dialectical relationship” with structures of corporate practice and are seen as “actors”, who are guided by routines (Franke 2017).

2.1.1. Collaboration, Alliances, and Partnerships

There are various approaches in IOR that explain the different types of cooperation between organisations. Well-known concepts are among others “collaboration”, “alliances”, and “partnerships.” By examining the advantages and disadvantages of “collaboration”, the social network perspective, for example, explains why actors form ties, and with whom (Kenis & Oerlemans 2010, 305). Instead of behaving in isolation, this approach considers actors to be “embedded within networks of interconnected relationships” (Kenis & Oerlemans 2010, 290). This can be a useful approach for understanding with whom organisations decide to enter relationships, and in which way these actions are “related to informational and control benefits” (Kenis & Oerlemans 2010, 305). However, it says little about general drivers of convergence, and does not consider power asymmetries within given relationships.

Dacin et al. (2010) concentrate on “alliances” and on the role of partner selection from an embeddedness perspective. The authors argue that firms are increasingly “relying on alliances with a single partner where no equity is involved” (Dacin et al. 2010, 91). They define alliance as “a cooperative agreement between at least two firms. These firms combine their resources and capabilities in the pursuit of collective and individual strategic objectives” (Dacin et al. 2010, 92). Dacin et al. argue that alliance partner selection is governed by strategic objectives and note that “the more closely allied those needs are to the firm’s existing product/market objectives, the more likely it seems that the search for partners will focus on firms which will be reasonably familiar to the managers of the local firm” (Dacin et al. 2010, 106). The transmittance of knowledge is considered to be a vital aspect for the formation of alliances (Dacin et al. 2010, 107).

The importance of knowledge-sharing for collaboration is also highlighted by Sandfort and Milward (2010). By looking at the public sector, they argue that collaboration has become increasingly important and that “governments all over the world are increasing

their dependence upon collaborative partnerships to delivery public services” (Sandfort & Milward 2010, 167). Collaboration can offer access to more resources and at the same time can help to reduce risks. Policy-makers suggest that partnerships increase efficiency and improve public services provided to citizens. Moreover, it enables the development of a “collaborative know-how” (Sandfort & Milward 2010, 162). Lotia and Hardy (2010), on the other hand, consider collaboration as a cooperative, inter-organisational relationship that neither relies on markets nor on hierarchical mechanisms of control. Instead, it is negotiated through constant communication processes (Lotia & Hardy 2010, 366).

Whereas Geddes (2010) focuses on IORs in local and regional development and argues that most partnerships are “characterized by serious inequalities of power and capacity among partners” (Geddes 2010, 217), Mandell and Keast (2010) emphasise the role of partnerships in the voluntary and community sector (VCO) and stress the importance of considering networks in analysis as well as the role of VCO organisations vis-à-vis other organisations. Hui et al. (2010), however, highlight the role of technology in IORs. They note that we no longer talk about repeated exchanges of commodities, and that we are instead “witnessing the rise of exchanges of customized technology services that are part and parcel of a firm’s core production processes” (Hui et al. 2010, 274). Thus, technology services cause a “fundamental shift of the way IORs are formed and managed.” It is therefore important to adapt to this ‘shift’ in theory as well as underlying assumptions used to explain IOR (Hui et al. 2010, 275).

Zhelyazkov (2018, 210) focuses on triadic closures. He argues that competitive concerns might constrain an organisation’s willingness “to facilitate connections for a collaborator to its other partners if the intermediary believes that the collaborator could potentially displace it as the preferred exchange partner of the other partners.” Such competitive concerns particularly occur if organisations are similar, for example, and thus easily substitutable (Zhelyazkov 2018, 211). Furthermore, he states that there is an increased likelihood of two organisations forming a relationship if they already have pre-existing relationships with the same party. This phenomenon is called a “triadic closure” (Zhelyazkov 2018, 212).

Similarly, Mascia et al. 2017 point out that collaboration does not only lead to more efficiency and prosperity but can also evolve into and encourage competition. However, Mascia et al. argue that organisations that are similar to each other “might find it easier to exchange resources and information, and to coordinate their operations and plans” (Mascia et al 2017, 1349). Yet, with increasing similarities between these organisations, the

prospect of rivalry potentially increases at the same time (Mascia et al. 2017, 1349). Thus, following this line of argument, the propensity of organisations to collaborate cannot be considered “linear” (Mascia et al. 2017, 1349). If two organisations rely on the same resources, they are more likely to compete with each other and thus their propensity to collaborate will be lower (Mascia et al. 2017, 1350). However, another viewpoint is that organisations that rely on the same resources will be more likely to adjust their structure towards each other and will thus become “more similar in their structure, climate and behavioural focus” (Mascia et al. 2017, DiMaggio & Powell, 1983). Mascia et al. argue that the higher the similarity, the more likely organisations will tend to collaborate, whereas the level of competition simultaneously increases.

Rzepka (2017, 166) points out that IORs are known as an important source of “competitive advantage”. According to her, collaboration, which is becoming increasingly important, constitutes a source of “profitable outcome”. One of the main reasons for companies to establish inter-organisational relations “is the achievement of synergy” (Rzepka 2017, 166). Advantages of collaboration are, amongst other things, a decrease in uncertainty, an increase in flexibility, gains in experience and potential, accelerating action and more market opportunities, as well as greater accessibility to resources and information (Rzepka 2017, 166). However, the competitive advantage of an organisation is linked to its dynamic character (Rzepka 2017, 162). As organisations in the context of a “global capitalist society” have to constantly compete, cooperation is largely based on the struggle for survival (Rzepka 2017, 162). Moreover, Rzepka suggests that IOR “are always based on strong leadership.” Only a “well-managed organization is able to implement joint actions successfully, strive for cooperation and realize determined goals.” Thus, in this sense cooperation is “based on concluded agreements which indicate the form of ties between business entities.” (Rzepka 2017, 162) In this respect, it is important to note that Rzepka mainly focuses on enterprises and business cooperation within a market-driven setting. As such, her model cannot be universally applied to every sector or organisation.

Cook (1977) also notes the impact of economic factors on IOR. According to the author, the creation of exchange relations among organisations primarily occurs for two reasons: “specialization and scarcity.” As many organisations perform specialized functions, it is necessary to exchange with other organisations in order to obtain the required resources (Cook 1977, 64). Given the need for exchange, organisations will also be ready to make commitments. As scarcity of resources precipitates organisational

uncertainty, organisations will “engage in exchange relations which make the availability of resources and the marketing of output more predictable” (Cook 1977, 65).

Schwartz (1976) concentrates on another form of collaboration, a concept called “enduring coalition”. By using case studies of the European Economic Community (EEC), the German CDU/CSU coalition and the Austrian grand coalition, Schwartz suggests that enduring coalitions can be understood as a “set of partners which has been preserved intact over a particularly long period of time” (Schwartz 1978, 186). In addition, an enduring coalition is “characterized by a record of functioning at least moderately effectively in making policy” (Schwartz 1976, 186). By developing a framework to explain long-term coalitions, Schwartz states that “each coalition was created and maintained amid ‘high cost’ situations” (Schwartz 1976, 187). Moreover, he argues that whenever coalition maintenance is considered a “good in itself”, the coalition partners will try to develop or preserve mechanisms that help them to deal with possible conflicts (Schwartz 1976, 188). In particular, the high costs of failing to form or maintain a coalition can be seen as major incentives. This idea is especially applicable when explaining the willingness to keep an organisation like the EU alive. Very often, the “cost of failure” would be too high. Schwartz shows this by explaining the historic unanimity rule of the EEC: “Put simply, the unanimity rule pushes members to take actions which distribute payoffs on important matters in at least a minimally satisfactory manner for each of the members” (Schwartz 1976, 192).

2.1.2. Concepts of Approximation, Convergence, and Mergers

Different approaches have further been used to examine how organisations move closer towards each other. By examining mergers of unions, Dewey states that the “merging of organizations, regardless of their function, requires lengthy and delicate negotiations” (Dewey 1976, 227). Moreover, Dewey notes that wherever efforts to merge were successful, they often required “individual sacrifices for the good of the organization” (Dewey 1976, 227).

According to Dewey (1976) economic factors have a major impact on merging processes. For example, “increasing costs of maintaining a union headquarters and staff” can be a key reason to reach out for enhanced convergence (Dewey 1976, 228). This is particularly the case for smaller or medium-sized unions, which are nevertheless expected to provide the same services as their larger counterparts. By presenting the case of the railroad industry, Dewey (1976) shows how declining employment led to a consolidation of

unions. As a result of changes in the railroad operations and an increase in use of other transport possibilities, railroad unions started to take the same route in order to cut expenses. Mergers in the food industry illustrate a similar scenario. However, in this case, mergers occurred to “eliminate intense rivalries and strengthen bargaining and organizing activities” (Dewey 1976, 231).

The different examples mentioned by Dewey demonstrate how mergers occur in different industries and in different contexts. As obstacles for merging processes, Dewey mentions rivalry, a “strong personality”, and differences in the union structure as well as methods of electing officers, and constitutional procedures (Dewey 1976, 228). Loyalty to the union and the fear of not being “adequately represented” can also be seen to thwart consolidation efforts (Dewey 1976, 228). Dewey’s analysis constitutes a good example for explaining mergers arising from changes in the sector and economic pressure. However, it does not provide a framework to explain enhanced cooperation and the gradual development of many mergers. Moreover, the analysis fails to examine asymmetries in power relations and conduct a nuanced explanation of how “mutual interests” can be considered driving forces behind collaboration.

Hassen et al. (2012) focus on the aeronautics industry in Montreal, indicating that approximation can be driven by the will or need for technological advancement. In the case of the aeronautics industry, the continuous mobilisation of resources and R&D investment is vital for the industry to survive. Hassen et al. point out that strong international competition demands businesses to “stay at the cutting edge of technology and to achieve productivity increases by creating new products and by developing new production techniques” (Hassen et al. 2012, 53). With this example, Hassen et al. demonstrate how different forms of “proximity” arise.

Hassen et al. (2012) also distinguish between four types of ‘proximity’: physical proximity, technological proximity, organisational or relational proximity, and cultural proximity. Physical proximity can be considered the “simplest form of proximity” and refers to the location of firms and institutions (Hassen et al. 2012, 57). Technological proximity can act in a similar way as organisational proximity. It is based on the notion that technology evolved through an evolutionary process and focuses on micro-economic bases of innovation. Relational or organisational proximity implies that firms and organisations choose to share or not to share certain patterns of thought, production, communication, and innovation (Hassen et al. 2012, 57). One can speak of organisational proximity when “groups of agents” decide to set up coordinating procedures for achieving

common goals (Hassen et al. 2012, 57). Organisational proximity is “immaterial and non-marketable”, instead “supported by multiple relations outside the market” (Hassen et al. 2012, 58). Cultural or institutional proximity can be considered as an “extension” of organisational or relational proximity (Hassen et al. 2012, 58). It entails that “entrepreneurs share the same representations, rules of conduct, and values.” Thus, cultural or institutional proximity is driven by interactions between organisations (or firms) and agents being engaged in a collective learning process (Hassen et al. 2012, 58). While a “strong relational proximity serves to establish a solid cooperation, it is also accompanied by a negative dominance of the large firms over the smaller ones.” Therefore, it would be more profitable for smaller firms to decrease their dependence on larger firms by increasing their business relations with other sectors (Hassen et al. 2012, 73).

Holzscheiter et al. (2016), look at processes of convergence in health governance and develop an “empirical-descriptive conceptual toolbox” that integrates the study of fragmentation and convergence in IOR (Holzscheiter et al. 2016, 8). According to these authors, convergence can be understood as “an increase in the number and depth of cooperative relationships between two or more formally independent organisational units” (Holzscheiter et al. 2016, 9). Correspondingly, they understand fragmentation as a decrease in these relationships.

Whilst Holzscheiter et al. consider all global policy-making as fragmented and complex, they also argue that one must conceptually distinguish between “movements of increasing convergence and movements of greater fragmentation between organisational units so that both directions of institutional transformation can be accounted for when studying concrete policy domains.” (Holzscheiter et al. 2016, 9) Moreover, they propose an explanatory framework to explain such movements. This framework draws on theories of meta-governance and critical IR norms theory (Holzscheiter et al. 2016, 9). Although the governance-perspective proposed by Holzscheiter et al. is very useful when understanding movements of convergence in an organisational field, it nevertheless lacks explanations on political motivations or interests of organisations, as well as innovation or market driven reasons for convergence. A deeper analysis of power-relations between the organisations is missing.

It is clear that there have been several critical and thorough attempts to explain the reasons behind and the nature of collaborations, partnerships, and alliances. But rarely do any of the studies mention the factors and circumstances that drive organisations closer towards each other. Although scholars have started to more closely examine the tendencies

towards rapprochement in terms of convergence or proximity, there is no well-established notion regarding the substantive drivers for organisational rapprochement. I argue that the reason for this are as follows:

- 1) Many scholars do not deal with “mergers” as they argue that they typically result in uniform organisations, meaning they cannot provide a holistic perspective through which to examine relationships between organisations (e.g. Cropper et al. 2010, 6).
- 2) The great variety of organisational structures and the complex nature of inter-organisational relations makes it difficult to detect “common patterns” that can be considered driving forces for rapprochement. As Rzepka (2017, 163) notes: “the reasons why inter-organizational ties exist vary depending on the type and form of a business entity and may be different for each participating company.”
- 3) Inter-organisational relations is still an evolving field, with many debates that have not yet entered “mainstream” academia. Moreover, several aspects concerning IOR have not been fully studied, as interest in IOR has only gradually increased in the past decades alongside the growth of organisations as powerful actors.

Clarity, applicability, and a synopsis of the presented concepts that could explain gradual convergence show that they remain limited. This paper therefore suggests a multi-level framework that could assist in better describing organisational rapprochement. In order to determine the different criteria within this multi-level framework of organisational rapprochement, however, different theoretical approaches need to be considered.

2.2. Organisational Institutionalism

Organisational institutionalism has started to draw attention to how external environments socially construct organisations and have an impact on their formal structures and policies (Powell & Bromley 2015, 764). According to this perspective, organisations stand in a position of mutual constitution with their environment (e.g. Franke 2017; DiMaggio & Powell 1983, 148, Smith & Powell 2008, 597; Smith 1992b). Tolbert and Zucker (1983, 22), for example, refer to organisations as “captives of the institutional environment in which they exist.” Meyer and Rowan suggest that organisations “play active roles in shaping [institutional] contexts” (Meyer & Rowan 1977, 29-30).

According to Greenwood et al. (2008, 2) institutional theory is “perhaps the dominant approach to understanding organizations”. The institutional perspective of

organisations has evolved since 1977 (Greenwood et al. 2008, 2), in particular with the works of Meyer and Rowan (1977), Zucker (1977), DiMaggio and Powell (1983), Tolbert and Zucker (1983), and Meyer and Scott (1992). During the 1970s, the general perception was that organisations were “argentic actors responding to situational circumstances” (Greenwood et al. 2008, 3) and were “influenced by their institutional and network contexts”. Thus, most theoretical perspectives of organisational institutionalism focused on the “relationship between an organization and its environment and examined how organizations adapted” (Greenwood et al. 2008, 3). The environment itself was largely understood or associated with the economic market (e.g. Meyer et al. 1992, 46).

Nevertheless, the notion that organisations and the environments in which they operate can influence each other can be a useful approach when attempting to understand why organisations collaborate or merge.

2.3. Bureaucratic Politics

The classic formulation of the bureaucratic concept by Max Weber (1950) is a good starting point when explaining the workings of bureaucratic structures of organisations. Weber argues that bureaucracy includes the application of rational-legal authority to the organisation of work, which leads to making bureaucracy an efficient form of organising human activity. Accordingly, bureaucracy can be explained as a rational process. Weber outlines certain principles of bureaucratic organisation, including a formal hierarchy, management by rules, functional speciality, and an impersonal environment. However, he also mentions the impact of bureaucracy on human beings, arguing that bureaucratisation can control several aspects of society, potentially confining individual freedom.

Weber’s view on bureaucracy also reveals his approach towards modernisation in the occident. As Sager and Rosser (2009, 1137) state, the Weberian bureaucracy “consists of a hierarchically structured, professional, rule-bound, impersonal, meritocratic, appointed, and disciplined body of public servants with a specific set of competencies”. Woodrow Wilson’s understanding of bureaucracy is in many aspects considered to be similar to Weber’s approach. However, Wilson draws attention to development and perceives Western history as a “linear modernization”, putting more emphasis on the evolutionary process (Sager & Rosser 2009, 1138). Moreover, it is important to note that the Weberian theory of bureaucratic politics is mainly concerned with internal structures and processes. It does not strongly take into account environmental aspects that may influence an organisation’s behaviour.

Following the notion of Weber (1950), Meyer and Rowan (1977) have analysed the rationalisation and diffusion of formal bureaucracies in modern societies (Greenwood et al. 2008, 3). According to their theory, modern society arose from the “complexity of networks of social organization and exchange” on the one hand, and “the institutional context”, on the other (Meyer & Rowan 1977, 346). ‘Relational networks’ in this context were considered to have an important influence. Meyer (1977) and Scott (1983) also argue that “complex networks of interactions between organisations would increase with the occurrence of rationalized myths” (Greenwood et al. 2008, 3), anticipating that complex and conflicted fields increase the variety of organisational forms. In addition, this “field complexity would increase the likelihood of myths becoming codified into formal regulations and laws” (Greenwood et al. 2008, 3). Following this logic, organisations are influenced by an institutional context that defines “what it means to be rational” (Greenwood et al. 2008, 3). As organisations are expected to behave in a rational manner, Meyer and Rowan (1977) underline that rationalized myths are “accepted as prescriptions of appropriate conduct” (Greenwood et al. 2008, 3). Scott (1983, 160) further notes that by “appearing to be rational”, organisations improve their chances of survival (Scott 1983, 160; Greenwood et al. 2008, 4).

Including these developing theories about the role of institutional perceptions of rationality, therefore, many other strands of neo-institutional analysis have also built upon the Weberian concept of bureaucracy and organisations. However, other arguments draw closer attention to the ‘co-evolution’ of organisations and their environments (Hasse & Krücken 2008, 539).

2.4. Networks and Network Governance

There have been numerous attempts to examine the workings of networks since the 1930s (Scott 1992, 164). Yet scholars have traditionally focused their attention on individual levels of relationships, ignoring the larger connections among organisations. This has changed during the past few decades (Scott 1992, 164). Most scholars dealing with networks now concentrate on the “form taken by a set of linkages” (Scott 1992, 165). “Networking” has also become a key category in the field of management sciences. In particular, relations between companies and institutions in the public sector, corporations and companies, public entities and non-governmental bodies, or between governmental organizations and private entities have become particularly interesting to researchers in this

field (Rzepka 2017, 162). On a broader scale, the notion of organisational networking is strongly related to forms of cooperation between enterprises (Rzepka 2017, 163).

Translating this network-perspective on issues of governance, Kohler-Koch examines (1998) how European integration can “contribute to a change of governance at national and sub-national levels” (Kohler-Koch 1998, 2). She argues that “compliance to government decisions will be assured by the legitimacy of institutions channelling in an efficient and normatively accepted way the input process and assuring output performance” (Kohler-Koch 1998, 1). She also proposes a ‘meso-level’ approach, considering the fact that “EC policies are highly sector specific [...] and are at different stages of development” (Kohler-Koch 1998). Governing can thus be defined as “fitting new regulatory mechanisms into an environment which is functioning according to its own regulatory logic and has so far been unwilling or unable to change” (Kohler-Koch 1998, 14).

2.5. The Concept of Social Relationship

The concept of social relationships can be taken as a starting point for examining the rapprochement between organisations. Weber’s notion of ‘social relationship’ has influenced many approaches towards this subject matter. Weber uses the term to:

“denote the behaviour of a plurality of actors in so far as, in its meaningful content, the action of each takes account of that of others and is oriented in these terms. The social relationship thus *consists* entirely and exclusively in the existence of a *probability* that there will be, in some meaningfully understandable sense, a course of social action.” (Weber 1950, 118)

First, Weber argues that “as a defining criterion, it is essential that there should be at least a minimum of mutual orientation of the action of each to that of the others” (Weber 1950, 118). Second, he suggests that

“the ‘meaning’ relevant in this context is always a case of the meaning imputed to the parties in a given concrete case [...]. Even in cases of such forms of social organization as a state, church, association, or marriage, the social relationships consist exclusively in the fact that there has existed, exists, or will exist a probability of action in some definite way appropriate to this meaning.” (Weber 1950, 118)

Thirdly, “the subjective meaning need not necessarily be the same for all the parties who are mutually oriented in a given social relationship” (Weber 1950, 119). Fourth, a “social relationship can be of a temporary character or of varying degrees of permanence.” (Weber 1950, 199) Fifth, “the subjective meaning of a social relationship may change, thus a

political relationship, once based on solidarity, may develop into a conflict of interests.”
Sixth,

“the meaningful content which remains relatively constant in a social relationship is capable of formulation in terms of maxims which the parties concerned expect to be adhered to by their partners, on the average and approximately. The more relational in relation to values or to given the action is, the more is this likely to be the case.” (Weber 1950, 120)

And finally, that “the meaning of a social relationship may be agreed upon by mutual consent. This implies that the parties make promises covering their future behaviour, whether toward each other or toward third persons.” (Weber 1950, 120)

Weber’s seventh principle outlines the fact that anticipated behaviour shapes relations and thus a willingness to adhere or agree to certain rules or promises. Moreover, Weber (1950) distinguishes between open and closed relationships. A relationship is ‘open’ in character if it is not “denied to anyone who wishes to participate and who is actually in the position to do so.” (Weber 1950, 139) In contrast, it is ‘closed’ if “participation of certain persons is excluded, limited, or subjected to conditions.” (Weber 1950, 139)

Blau (1964) notes that “there are a number of similarities between social exchange and economic exchange. Individuals who do favours for others expect a return, at the very least in the form of expressions of gratitude and appreciation, just as merchants expect repayment for economic services.” (Blau 1964, 57) Thus, social exchange is also dependent on trust between the interacting parties. Cropper et al. 2010 suggest that researches typically “observe ‘values’ for the relationship(s) between two or more organizations” (Cropper et al. 2010, 11). Cropper et al. in this regard differentiate between ‘interactive’ relationships and ‘non-interactive’ relationships. ‘Interactive’ relationships can be conceptualised within the dimensions of “content, governance mechanisms, and structure” (Cropper et al. 2010, 11).

Various scholars have also emphasised the role of power in IOR (e.g. Cook 1977, Benson 1975, Galaskiewicz 1985). ‘Power’ according to Weber (1950) is defined as “the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests.” (Weber 1950, 152) Galaskiewicz (1985, 283) notes that in the IOR literature, power has always been conceived in “relational terms and, more specifically, within a social exchange framework.” There exists the notion that “the more power an organization has, the more influence it has to determine the nature of the interorganizational exchange; that is, to

determine the form of the interaction and the ratio of exchange” (Cook 1977, 66). Benson (1975) shows this by examining the relationship of power and dependence. According to his arguments, state-run employment security agencies, for example, gain power because clients must be referred to them for job placement. As power determines social relationships, it is a vital factor to consider when examining organisational rapprochement.

3. A Theoretical Framework to Explain the Process of Organisational Rapprochement

Having critically examined the existing body of literature on inter-organisational relations, it is clear that although there are a great variety of different approaches to explaining relations between organisations and aspects of collaboration, there is little explanation of the driving factors of rapprochement. To bridge this gap, this paper suggests a new framework called ‘organisational rapprochement’. In order to explain this process, this paper will lay out a multi-level framework that should help analyse the evolution of rapprochement between organisations. This framework draws on different approaches of IOR theory, suggesting five aspects for analysing rapprochement at different levels:

- 1) Environments:** The notion that the environment influences constitution and behaviour of an organisation and vice versa, as suggested by organisational institutionalism or social neo-institutionalism, explains how structures and environments are an essential feature of IOR and hence have an impact on processes of rapprochement. The organisational environment can, on one hand, be understood as consisting of other actors and organisations. On the other hand, it is also the economic structure, or the characteristics of a certain sector or industry. As such, common phenomena such as ‘competition’ can be viewed as a direct result of the organisational environment. In the following analysis, this concept is particularly relevant when examining “common goals and values”, “capacity building and knowledge sharing” and “coordination and joint projects”.
- 2) Research and Development:** As Hui et al. (2010) have pointed out, innovation is an essential driver for collaboration between organisations. Research and development, which implies the existence of an endeavour for innovation and advancement and the idea of progress, is therefore an important factor that explains

the nature of relationships. As it is usually dependent on investment, this concept also includes financial issues. In addition, it is connected to access to knowledge and knowledge development. In the following analysis, it finds in particular expression when examining “capacity building and knowledge sharing”. It can also be found in areas of “common goals and values” and “coordination and joint projects”.

- 3) **Network Governance:** This aspect, derived from the network governance and regime complexity approach, contains the idea the organisational actors influence each other and thus have an impact on decision-making processes, interests, as well as working procedures. This aspect covers the complexity of interaction and describes how agents and nodes are interconnected, and thus can influence each other. It is especially reflected in the dimension “capacity building and knowledge sharing”, as well as in the dimension “coordination and joint projects”.
- 4) **Rules and Regulations:** Drawing on Weber’s notion of bureaucratic politics, this paper argues that rules and regulations influence decision-making and drive directions of organisations. The idea of rationalisation and efficiency are essential to understanding the application of rational-legal authority to the organisation of work. As Greenwood et al. (2008, 3) state, a field’s complexity can also increase the “likelihood of myths becoming codified into formal regulations and laws.” This principle is clearly reflected in the area of “legal framework and instruments” and is particularly relevant when looking at “communication” as well as “coordination and joint projects”.
- 5) **Power:** Power relations and dynamics are decisive in allowing organisational rapprochement, as well as determining the nature and workings of that rapprochement. Drawing on Weber’s argument (1950) that one can talk of power if “one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests” (Weber 1950, 152), this paper understands power structures as a given in all social relationships. As Talcott Parson (1976) demonstrates, hierarchical structures are part of organisational frameworks. The main question in this respect is whose interests prevail within any single relationship.

Drawing on the notion of ‘convergence’ by Holzscheiter et al. (2016), I therefore suggest that rapprochement can be understood as an increase in ties and linkages on different levels that intensify the depth of a cooperative relationship between two or more organisational actors. To explain the relationship and gradual convergence between organisations, however, it is essential to look at ‘rapprochement’ as a dynamic process underpinned by constant change. It does not offer a ‘static variable’ for measurement. This paper considers ‘rapprochement’ as a multi-dimensional process of gradual approximation. It implies a degree of fluctuation and does not necessarily follow a clear path of linear development. The integration of the different concepts outlined previously, will therefore be fruitful, as they help explain rapprochement in a substantive way by taking into account the different drivers behind convergence.

To examine rapprochement and the complexities of an ongoing process in change, it is essential to use a framework that allows for deviation. This makes the use of quantitative measurements less meaningful. Hence, to analyse the factors leading to a rapprochement of organisations, this paper will use a ‘criteria catalogue’ that detects the driving factors behind convergence at a qualitative level. This should provide a better assessment of organisational convergence.

- 1) Common Goals and Values:** Goals and values are influenced by environments and represent the interests of organisations. Common goals and values can thus enable and enforce rapprochement between organisations. The question concerning rapprochement, however, is how far organisations have approximated their goals and values and to which extent they are willing to carry out reforms or make concessions.
- 2) Legal framework and Instruments:** Legal frameworks and instruments can push an organisation to adopt reforms that are favourable or necessary for convergence. Moreover, common rules or regulations can be considered a legal basis for a uniform policy and for close cooperation.
- 3) Capacity-building and Knowledge-sharing:** Capacity building can be seen as the aim to improve the competence and workings of an organisation. Effective knowledge sharing is a crucial part of this. Research co-operation and the exchange

of information and skills have a positive impact on the gradual rapprochement between organisations. However, this also raises financial questions.

- 4) **Communication:** Advocacy and communication are essential features when defining the relationship between organisations. Effective communication is also an fundamental driver for enhanced cooperation and gradual approximation. Moreover, communication may also have a ‘spill-over effect’ on an organisation’s development or aims.
- 5) **Coordination and Joint Projects:** Joint projects enhance close cooperation and have an impact on the organisation’s goals and interests. Having a coordination mechanism in place facilitates communication and fruitful cooperation. Moreover, budgetary questions are decisive when it comes to the effective functioning - or non-functioning - of planned projects.

4. Methodology

A qualitative study has been performed to investigate the applicability of a multi-level theoretical framework of organisational rapprochement. After careful consideration, the following indicators have been identified in order to uncover the causal relationships between the different dimensions outlined in this paper:

- “Dimension 1” (Common Goals and Values): A common vision, clear aim or goal that is to be accomplished, promotion of common interests;
- “Dimension 2” (Legal framework and instruments): Agreements, declarations, resolutions that provide a framework for cooperation, partnership and joint projects;
- “Dimension 3”: (Capacity-building and knowledge-sharing): Exchange of knowledge, research and development cooperation, informal networks, joint investment;
- “Dimension 4” (Communication): Steady communication flows, communication of common interests and/or goals, informal communication, reporting mechanisms, reciprocal communication;

- “Dimension 5” (Coordination and joint projects): Coordination mechanisms, planning and implementation of joint projects, harmonisation of work processes, division of labour, common finance regulations.

Dimension	Causal relationship	Indicators
Common goals and values	Common goals and values, which can be influenced by the environment, define the interests of an organisation. The question concerning rapprochement is how far organisations have approximated their goals and values and to what extent they are willing to carry out reforms or make concessions in order to achieve these goals.	Common vision, clear aim or goal that is to be accomplished, promotion of common interests
Legal framework and instruments	Legal framework and instruments can push an organisation to adopt reforms necessary for convergence. Moreover, common rules or regulations can be considered a legal basis for the application of a uniform policy and closer cooperation.	Agreements, declarations, resolutions that provide a framework for cooperation, partnerships and joint projects
Capacity-building and knowledge-sharing	Capacity building is the aim to improve the competence and workings of an organisation. Effective knowledge sharing is a crucial part to this. Research co-operation and the exchange of information and skills have a positive impact on gradual rapprochement between organisations. This also raises financial questions.	Exchange of knowledge, research and development cooperation, informal networks, joint investment
Communication	Advocacy and communication are essential features for defining the relationships between organisations. Effective communication is also an essential driver for enhanced cooperation and gradual approximation. Moreover, communication can also have a ‘spill-over effect’ on an organisations development or aim.	Steady communication flows, communication of common interests and/or goals, informal communication, reporting mechanisms, reciprocal communication
Coordination and joint projects	Joint projects enhance close cooperation and have an impact on the organisation’s goals and interests. Having a coordination mechanism in place facilitates communication and fruitful cooperation. Moreover, budgetary questions are decisive when it comes to the effective functioning or non-functioning of planned projects.	Coordination mechanisms, planning and implementation of joint projects, harmonisation of work processes, division of labour, common finance regulations

Table 1: Overview

Material: The material I use in this thesis to analyse rapprochement according to the five dimensions includes official documents such as communications, conventions, declarations, resolutions and treaties that have been put in place between the ESA and the EU.

5. The Case of the ESA and the EU: From the Treaty of Rome to Treaty of Lisbon

The convergence between the ESA and the EU in the area of outer space and space activities has culminated in the joint creation of a European Space Policy (Von Der Dunk 2003, 83). Ties between the EU and ESA have grown stronger since 1998 (Sigalas 2012, 111), when the Council approved an agreement between the EU (still EC at that time), the ESA and the European Organisation for the Safety of Air Navigation (EOSAN) over the development of Global Navigation Satellite System (GNSS). The Framework Agreement between EU and ESA, which entered into force in 2004, further consolidated cooperation between the two parties (Sigalas 2012, 111). The main aim of this agreement was to pool both resources and expertise, and to develop a coherent European space policy.

However, scholars like Von der Dunk (2003, 83) argue that things are not quite so “straightforward”. A potential difficulty in the relationship between ESA and the EU is the fact that “the delineation of respective competences and tasks between the two centres of ‘space power’ is not always clear-cut” (Von der Dunk 2003, 83). As both organisations are expanding their competencies, they will inevitably venture into their respective domains. In addition, Von der Dunk (2003) also suggests that a fundamental flaw in the gradual convergence is “that the hierarchy of the respective roles of ESA and the EU in terms of space activities has not been established.” As such, in every case where the interests of the two parties do not coincide, “these interests will continue to give rise to institutional tugs-of-war. In short, there are still two captains on the European spaceship today” (Von der Dunk 2003, 83).

Initial texts driving the common space strategy between ESA and the EU, are amongst others, the “Joint ESA/Commission Document on a European Strategy for Space”, the resolutions adopted unanimously by the Space Ministers of ESA Member States, as well as the Research Ministers of the European Union at a parallel meeting on 11 November 2000 (Creola 2001, 87). According to Creola (2001, 87) the fundamental progress embodied in these documents is that on the one hand the “importance of Space for

Europe's future is recognised at the highest political level", but on the other hand that "the Common Space Strategy establishes the ESA firmly on the path towards becoming the ESA of an enlarged and consolidated EU." However, Creola points out that the institutional diversity of space cooperation in Europe often leads to "unnecessary competition and even duplication" (Creola 2001, 87).

Yet since the introduction of a Green Paper on European Space Policy in January 2003, the debate on the future of the institutional structures of the European space framework has been further augmented (Hoerber 2009, 206). One response was a proposition to incorporate the ESA into the EU framework, as was the case with the Western European Union (WEU), which became the defence agency of the EU (Hoerber 2009, 206). Many scholars dealing with space policies in Europe have addressed this question. Whereas some more or less welcome the idea of bringing the ESA into the EU framework (e.g. Creola 2001, Hoerber 2009), others are more sceptical (e.g. Von der Dunk 2003). Although Von der Dunk, for example, states that including the ESA as a "space agency" within the EU would be a logical result, as it would enhance the EU's strength and power in the global arena, he nevertheless also notes that the EU has little practical experience of actually running a similar operational organisation (Von der Dunk 2003, 84). He argues that "while the Commission in this context has contemplated turning ESA into a 'space agency of the EU', a much more fruitful approach would be the other way round: for the EU to become a member of the ESA." (Von der Dunk 2003, 83) According to him, "the option of the EU becoming a member of ESA jumps to the eye as the most efficient and rapidly achievable solution, and should be seriously studied as to its further ramifications, possibilities and challenges" (Von der Dunk 2003, 85).

Examples of cases where the EU became a member of an organisation instead of vice versa include Eurocontrol and the WTO. Von der Dunk (2003) reiterates that any subordination of the ESA to the Commission may not work in the long run, instead having a negative impact on the space research and development sector. He further notes that these problems are exacerbated by the continuing enlargement of the EU, which does not only "stretch the Commission's capabilities to the extreme", but will "result in a number of states having a say, through the EU-legislative machinery, over expensive and still nonroutine activities in which they have, so far, nothing at stake politically as well as financially" (Von der Dunk 2003, 84).

Hoerber, on the other hand, argues that some oppositional voices are likely to be a form of resistance to the EU's move towards enlargement (Hoerber 2009, 206). Although

he considers EU membership of the ESA an option, he ultimately discounts this idea. He notes that financial challenges, such as the financial sanctions from the European Parliament, are a strong argument for bringing ESA into the political framework of the EU instead (Hoerber 2009, 207). Furthermore, Hoerber considers integrating ESA into the EU as a “political step”, which he argues “could well serve to further enhance the political influence of the EU in the future.” He also notes that this would highlight the importance of space policies at the political level. According to Hoerber, a “concerted and common European space strategy might be the next move, taking Europe forward to a position long enjoyed by the Americans. This would implement one element of further integration of all of Europe’s public organisations” (Hoerber 2009, 208). What remains important when discussing the intra-institutional issues, however, is the fact that they can be regarded as a “result of interplay between sovereign states, through the various constituent treaty members either of the EU or of ESA or of both” (Von der Dunk 2003, 84). This implies that the final say lies with the member states.

However, in order to better understand the gradual rapprochement between the ESA and the EU, it is vital to consider the context of space policies in Europe. The following section will briefly outline the institutional environment of the European space sector.

5.1. EU Space Policy and Structure

The European way of “doing space” differs from other countries in that, whilst cooperative, it has no fully integrated space policy (Du Montluc 2012, 74). When the Commission issued its first communiqué on space in 1988, the ESA had already been in existence for 13 years, and many of the European states had a national space policy of their own – France, the UK, Germany and Italy in particular (Sigalas 2012, 111). Right from the beginning, the EU laid out its efforts in the arena of space travel to be a ‘complement’ rather than a substitute for pre-existing national space policies (Sigalas 2012, 111). Thus, Article 189 of the TFEU states that the EU would support “joint” initiatives, rather than creating its own programmes and actions. According to Sigalas, this suggests the EUSP should be considered as “being part of a broader European space policy (ESP) that involves the EU, ESA and individual states” (Sigalas 2012, 111). It follows from this argument that the EU’s involvement in space has only supra-nationalised certain parts of the space sector, leaving other areas outside its competences (Sigalas 2012, 111).

Article 4 of the TFEU states that the EU has the “competence to carry out

activities, in particular to define and implement programmes without, however, preventing the member states from exercising their own competence” (European Union 2016). But over the past few decades, it has become apparent that European space policy has already acquired a political dimension. The enhanced formal cooperation between the ESA and the EU can be considered one example of the growing political importance of space matters in Europe (Hoerber 2012, 77).

As scholars like Gaubert and Lebeau (2009, 38) have pointed out, one of the major questions is how far Europe will be able to lay down a coherent space policy. Despite some progress, they argue that there is yet to be an adequate way to use “the technical and industrial potential with which Europe has equipped itself” (Gaubert & Lebeau 2009, 38).

Initially, the EU defined itself as an economic community, whereas the ESA was expressly created to be concerned with space issues (Froehlich 2010, 1262). During the past years, however, with the extension of the EU’s competences, the involvement of the EU in space has increased (Gaubert & Lebeau 2009, 37). The Treaty of Lisbon plays an important role, as it expressly states a shared competence in the area of space (European Union 2007, Art. 2C). It is thus essential to consider how the Lisbon Treaty may have shaped and reflected the nature of ESA-EU agreements already in force (Froehlich 2010, 1263).

5.2. The Role of National Space Programmes

The multi-governance structure of Europe’s space policy is an essential element for understanding the complexity of the European space arena. While the 2009 European Space Policy and the Lisbon Treaty provided new space competency to the EU, national programmes are still strong drivers of space activities, especially for industrial and national security reasons (Rieder et al. 2009, 134). It is also important to note that within the ESA itself, each member state has a unique national space governance structure (Adriaensen et al. 2015, 360). As such, a coherent approach between different actors is not always apparent. For example, no clear political strategy has been identified in the field of international cooperation in space (Venet 2012, 60). In addition, the large number of actors and stakeholders involved in European space governance contribute to a wide range of approaches, interests and capabilities (Venet 2012, 60). Internal coordination plays an essential role, and this is particularly true for member states with a smaller space heritage, like a number of Eastern and Central European countries (Venet 2012, 60). Another problem mentioned by Venet (2012) is the heterogeneity of the legal framework for space

activities in Europe (Venet 2012, 60). Whereas several countries have ratified UN space-related treaties, others have not. Furthermore, not all countries have enacted national space legislation. Analogically, the ESA and the EU therefore have different legal frameworks and hence also different rules (Venet 2012, 60).

5.3. European Defence Issues

When talking about space, it is important to keep in mind that the sector is a strategic one. It contributes to other key EU policies, including the Common Security and Defence Policy (CSDP). According to Venet (2012) these structural political factors can “be both enablers and constraints for a coherent and efficient European space governance architecture” (Venet 2012, 60). In addition, the defence sector is a domain where cooperation between several European partners is traditionally more difficult. The multinational space-based imaging system (MUSIS) was often presented as an illustration of this difficulty, described as “the failure of the intergovernmental approach” (Venet 2012, 60). For De Montluc, this comes as no surprise, as there is no integrated European defence, no European army, and no doctrine about the use of force (De Montluc 2012, 74). Furthermore, Europe has “not really succeeded in formulating a complete political strategic approach to space policy in the way other powers have done” (De Montluc 2012, 74). Creola (2001) also points out that the integration of the ESA into the EU framework will stumble across the problem that the strategy document entails including space systems as part of the CSDP. This leaves ESA members with the questions about their willingness to embrace the idea of the ESA having a greater role in military space technology, especially if the fact that the ESA Convention contains a “exclusively for peaceful purposes” clause is taken into account (Creola 2001, 88).

5.4. European Space Industry

The space industry can be commonly defined as “the productive capacity and skills needed” that “possesses both the means to get into space (launchers) and the means to obtain services from it (satellites)” (Gaubert & Lebeau 2009, 38). One of the major difficulties in funding in the European space sector is that the “rules of the commercial world often do not apply” (Venet 2012, 59). Since space is not entirely market-driven (Rieder et al. 2009, 134), most space programmes are dependent on strong public funding. It is thus crucial to both ensure a constant flow of funding, and to keep the costs under control (Venet 2012, 59).

An effective and harmonised industrial policy is important (Rieder et al. 2009, 134). The EU has enjoyed a legal personality since the Treaty of Maastricht (1992). According to Hoerber, this clearly highlights the EU's aim to lead politically (Hoerber 2012, 79). In this sense, the EU industrial policy for the space sector must also be seen as part of "a concrete policy of economic integration, as well as the means for the EU to protect its space sector from outside competition" (Hoerber 2012, 79). The procurement of space technology reflects the EU's political will as well as its pursuit of economic cohesion (Hoerber 2012, 79).

Gaubert and Lebeau (2009) also show that relations between political authorities and the space industry are for the most part conducted through space agencies (Gaubert, & Lebeau 2009, 38). These organisations are usually public organisations, with their own technical strengths. This gives them the ability to propose space programmes directly to political decision makers, as well as the technological and legal competence to deal with the space industry as a whole (Gaubert & Lebeau 2009, 38).

5.5. Development of the European Space Agency (ESA)

The European Space Agency represents a special case in the sector (Rathgeber 2012, 156, Mudders 1997, 1). Indeed, the ESA is often portrayed as being one of the most important achievements of the cooperation of European countries in the scientific and technical domain (Eito-Brun & Rodriguez 2016, 552). As an intergovernmental organisation with 22 member states and 7 cooperation members, the ESA plays an important role in the development and implementation of the European space policies. It is responsible for the coordination and the leveraging of the capabilities of national industries (Eito-Brun & Rodriguez 2016, 552).

The ESA's roots can be traced back to the 1960s. After the Second World War, Western European nations decided to create two space agencies: the European Launch Development Organization (ELDO) and the European Space Research Organization (ESRO) (Freiherr von Preuschen 1978, 46, Eito-Brun & Rodriguez 2016, 552). With the ESA Convention (1975), which was based on the Resolution adopted by the European Space Conference on 20 December 1972, the two organisations were merged into one, and the ESA was officially established. *De facto*, the ESA came into existence on the day after the Convention was ratified, on May 31, 1975. This was the date the organisational structures of ESRO and ELDO were unified (European Space Agency 1975, Freiherr von Preuschen 1987, 47). However, it took some time until the unification of both the historic

space programs was achieved (Freiherr von Preuschen 1978, 46).

The ESA was founded as an international organisation with a legal personality (European Space Agency 1975, 41). Its main purpose to explore space, with the aim to “integrate the European national space programmes into a European space programme as far and as fast as reasonably possible” (European Space Agency 1975, 11). There were 10 founding member states: Belgium, Denmark, France, Germany, Italy, the Netherlands, Spain, Sweden, Switzerland and the United Kingdom. A key goal was to “increase the efficiency of the total of European space efforts by making better use of the resources at present devoted to space and to define a European space programme for exclusively peaceful purposes” (European Space Agency 1975, 12). The ultimate purpose of the Agency, as stated under Article 2 in the convention, was thus “to provide for and to promote, for exclusively peaceful purposes, cooperation among European States in space research and technology and their space applications” (European Space Agency 1975, 13).

It is important to note that not all member countries of the EU are members of the ESA, and not all ESA member states are members of the EU. Moreover, the ESA is an entirely independent organisation - neither an EU agency, nor an EU body. Nevertheless, the ESA has increasingly close ties to the EU, the foundations for which were laid through the ESA-EU Framework Agreement. According to the 2014 Report of the European Commission, 75% of the EU’s space budget is delegated to the ESA itself (European Commission 2014, 3). Moreover, the Multi-annual Financial Framework 2014-2020 states that €12bn has been committed for the development of large-scale European space programmes like Galileo, EGNOS and Copernicus (European Commission 2014, 3). The funding the ESA receives from the EU thus makes about 20% of the ESA budget, making it the largest financial contributor (European Commission 2014, 6).

6. Analysis: The EU-ESA Relationship – A Path towards Rapprochement?

In order to understand the evolving relationship between the ESA and the EU, the multi-level theoretical framework of organisational rapprochement outlined earlier in this paper will now be applied. As stated previously, the different elements, or “dimensions” are as follows: common goals and values, legal framework and instruments, capacity-building and knowledge-sharing, communication, and coordination and joint projects.

Dimension 1: Common Goals and Values

A thorough analysis has highlighted the many agreements that indicate the presence of shared common goals and values between the two organisations. The Framework Agreement between the ESA and the EU, for example, which entered into force in May 2004, outlines the aim of an “overall European Space Policy” as well as a “common basis and appropriate practical arrangements for efficient and mutually beneficial cooperation”. The cooperation between the ESA and the EU is explicitly stated as a goal (European Union & European Space Agency 2004).

Documents, such as the “White Paper on Space” (2003), drafted between the EU and the ESA, provides an “Action Plan” (“European Space Programme”) that includes a list of recommendations that should assist the implementation of a common European Space Policy (European Commission 2003). The paper also states that the “Commission’s recommendations require all stakeholders to work and combine successfully behind a common vision” (European Commission 2003, 6). The 2000 European Strategy for Outer Space further underscores a common goal to establish a “technological base” and an “operational infrastructure” in the face of global competition (Council of the European Union, 2000), and the 2007 Council Resolution aims to increase the development of “space related integrated applications” through combined efforts (Council of the European Union 2007).

Article 189 of the TFEU (Treaty of the Functioning of the European Union) that came into place with the Lisbon Treaty, also emphasises the EU’s aim to establish “appropriate relations with the European Space Agency” (European Union 2007). Notably, however, this goal is articulated by the EU and not by the ESA. But according to the 2012 “political declaration towards the European Space Agency that best serves Europe” (European Space Agency 2012) the ESA does state that the future of the agency should, amongst other commitments, encompass the “EU competence in space, in accommodating

in consequence ESA's operation and thus providing efficient management of EU funded programmes under EU rules." One can therefore argue that both parties – the ESA and the EU – have demonstrated a willingness to enhance cooperation with each other, even if their underlying motivations for doing so may differ.

The "Joint statement on shared vision and goals for the future of Europe in space by the European Union and the European Space Agency" (2016) emphasises the wish to shape Europe's standing in the space sector, as "both competition and cooperation are intensifying" (European Union & European Space Agency 2016). According to the document, the EU and the ESA "share the common vision and goals for European sector to respond to these new challenges and turn them into opportunities." The shared ambition is thus that "Europe remains a world-class actor in space and a partner of choice on the international scene" (European Union & European Space Agency 2016). Moreover, the document explicitly states that "Europe should be able to fully benefit from its space solutions to implement its policies, to strengthen European values and security, improve knowledge and foster prosperity" by 2030. In order to achieve this somewhat broadly defined and ambitious goal, the EU and the ESA aim to "maximize the integration of space into European society and economy", "foster a globally competitive European space sector, by supporting research, innovation, entrepreneurship for growth and jobs", and ensure "European autonomy in accessing and using space in safe and secure environment". The two organisations also "emphasize their intention to reinforce their cooperation in the future" (European Union & European Space Agency 2016).

In contrast, finding common or shared *values* represents a greater challenge. However, there are several indications within the various agreements and documents that suggest a level of shared understanding. These are, amongst other things, a common Space Policy for Europe, and the peaceful use of outer space. However, these 'common values' might be challenged in future through the increasing efforts by the EU to integrate its space policies into the CSDP. According to the Communication of the European Commission to the Council and the European Parliament, "the relations between the EU and the ESA are constrained by the fact that ESA's membership includes states that are non-EU members, which poses an obvious problem in general and an even more acute problem when it comes to security and defence matters" (European Commission 2012, 3). Thus, the CSDP presents a case of "diverging interests", where objectives drift apart. The asymmetry in membership can cause potential strains in the relationship between the EU and the ESA, as

highlighted in the EC Communication of 2012, which states that with an increase in collaboration,

“this asymmetry combined with a voting system where each Member State has one vote in the ESA Council and the key decisions within this body are adopted by using unanimity gives ESA members, which are not members of the EU, disproportionate leverage over matters that may affect the EU. In addition the asymmetry complicates discussions particularly as regards to security and defence matters” (European Commission 2012, 3)

The extent of each parties’ willingness to make reforms or concessions is difficult to gauge, as many negotiations happen behind ‘closed doors’.

Many common aims, some common values

One can therefore conclude that the following can be adduced: First, that a common vision does partly exist, when studying documents that outline a “European Space Strategy” and envision the achievement of development, security and prosperity for Europe through outer space. Second, that a clear aim or goal is often apparent when it comes to individual projects working to enhance the European space sector. Finally, an aim to ensure better cooperation in the future is also apparent. Common values have been partially outlined – for example, with the peaceful use of outer space and the promotion of a cohesive European Space Strategy. But it is clear that one can also speak of diverging values when considering the CSDP and its implications for future relations.

In summary, the ESA and the EU have several common aims, as laid down in the various agreements and strategy papers. Both parties share a desire for enhanced cooperation in order to develop the European space sector. The ESA and the EU have further approximated their goals. Moreover, general visions such as a harmonisation of a European Space Policy can also be found. Yet it is important to note that these future ‘visions’ might not reflect those of individual states and actors who are members of the ESA and/or the EU.

Common values include a common space policy for Europe, the peaceful use of outer space and a belief in mutual cooperation. However, the EU’s objective of establishing closer links and synergies between the civil and defence dimensions of space can be considered an obstacle for the EU-ESA relationship. Nevertheless, it can be argued that many of the common interests of the EU and ESA are promoted in most of the agreements and papers. Whilst common goals and values can be found concerning joint projects and cooperation policy and mission objectives are still set according to each organisation’s own institutional frameworks.

Dimension 2: Legal Framework and Instruments

There are numerous agreements and declarations in place that regulate the cooperative efforts of the EU and ESA. The 1998 Council resolution on the “reinforcement of the synergy between the European Space Agency and the European Community” (Council of the European Union 1998) can be considered one of the major starting points of ESA-EU rapprochement. On 2 December 1999, another resolution was adopted by the ESA Council on “developing a coherent European space strategy” (Council of the European Union 1999). Consequently, the Council of the European Union also adopted a resolution on a European space strategy on 16 November 2000 (Council of the European Union 2000). In this resolution, the Council recognises

“the respective roles of governments, the European Union and the European Space Agency (ESA) in supporting and consolidating research and development work in connection with space systems as well as the need for Europe to have a technological base and the related operational infrastructure enabling it to hold its own in global competition.” (Council of the European Union 2000)

It calls upon the Commission, together with the ESA, “to look into conditions for stimulating private investment in the space industry in Europe.” Most importantly, in section (9), the Council agrees that

“the Commission and the ESA should seek to arrive at an efficient framework for cooperation whereby the ESA acts as the implementing agency for the development and procurement of the space segment and ground segment involved in the European Community's initiatives, giving the Union access to expertise, including the network of technical centres coordinated by the ESA.” (Council of the European Union 2000)

This resolution lays down a specific division of labour by stating that the ESA should act as an “implementing agency.” Furthermore, the Council requests the Commission under (10) to set up in cooperation a “joint high-level Task Force involving the Commission and the ESA Executive.” The role of the Task Force is “to develop further the European space strategy and produce proposals for its implementation” (Council of the European Union 2000).

In January 2003, the Commission released a Green Paper on European space policy in cooperation with the ESA. The aim of the Green Paper was “to initiate a debate on the medium-and-long-term future use of space for the benefit of Europe, and on policy options available” (European Commission 2003, 6). The Green Paper states that it is necessary for Europe to “speak with one voice.” The diversity of the European space sector should, if complying with the subsidiarity principle, therefore be structured in a way that can

“achieve greater efficiency.” It goes on to suggest that “Space is the reason for the existence of ESA, a strong priority being given to the scientific and industrial mastery of the technology and systems (“technology push”). The Union, however, has recourse to space as a generic tool when it provides useful support for various Community policies (“demand pull”).” Combining these two approaches can be fruitful. It further states that “[p]ermanent institutional solutions should now be introduced” (European Commission 2003, 26).

The Framework Agreement between ESA and the EC, which entered into force in May 2004 and is still considered to be one of the most important documents regulating ESA-EU regulations, has two main aims. The first aim is the “coherent and progressive development of an overall European Space Policy” which should “seek to link demand for services and applications using space systems in support of EU policies with the supply through ESA of space systems and infrastructures necessary to meet that demand”¹ (European Commission & European Space Agency 2004, Article 1). The second aim is the establishment of a framework “providing a common basis and appropriate practical arrangements for efficient and mutually beneficial cooperation” between the ESA and the European Community, “fully respecting the institutional and operational frameworks”. This should facilitate the setting up of joint initiatives and provide a stable framework for ESA-EC cooperation (European Commission & European Space Agency 2004, Article 2). With the title: “Space: a new European frontier for an expanding Union. An action plan for implementing the European Space policy” the Commission, building upon the Green Paper consultation about future options for European activities in space, proposed a 2003 White Paper for the implementation of an extended European Space Policy. Again, drafted in cooperation with the ESA, the White Paper includes proposals for joint ESA-EC initiatives and takes the Framework Agreement as its basis for implementation. According to this White Paper, furthermore, the implementation of a European Space Policy comes in two phases:

“the first (2004-2007) will consist of implementing the activities covered by the recently agreed

¹ This division of roles suggests that the EU works on the “demand side for space-related services and applications”, whereas the ESA is responsible for the “supply side” (Sigalas 2012, 111). Thus, as Sigalas (2012) points out, the EU can be considered as being “last resort” where European space-related decisions are concerned. Article 6 of the Framework Agreement also states that “[t]he Parties shall consult each other regularly in order to coordinate their activities to the fullest extent.” (European Commission & European Space Agency 2004, Article 6). These exchanges of information and consultation processes can be seen another key characteristic of the EU-ESA relationship.

Framework Agreement between the European Community and ESA; and the second (2007 onwards) will start after the coming into force of the European Constitutional Treaty which is expected to establish space as a shared competence between the Union and its Member States.” (European Commission 2003, 4)

Concerning the extended competencies of the Union, the White Paper notes that “the Union will be more strongly equipped as a global leader in the political, economic and scientific spheres” (European Commission 2003, 6). Greater investment and more effective programmes should help to “raise the Union’s political standing in the world, sharpen its economic competitiveness and enhance its reputation for scientific excellence” (European Commission 2003, 6-7). The paper then highlights that the Commission should,

“benefiting from its collaboration with the ESA, [develop] a Strategy for international space co-operation for the next decade, with particular emphasis on supporting the EU’s CFSP and sustainable development strategies; an international conference on space should be organised before the end of 2004.” (European Commission 2003, 21)

Further recommendations include the suggestion that the “ESA remain[s] the lead agency for launcher development”, whereas “the EU should commit funding for sustaining operational ground infrastructure as an area of common European interest, complementing a coherent European launcher initiative.” Furthermore,

“the European Union should have the lead responsibility for federating society’s needs for space-based services relevant to EU policies and for co-ordinating their delivery, while the European Space Agency should take the lead in elaborating, proposing and developing the required solutions.” (European Commission 2003, 37-38)

Thus, as also mentioned in the Framework Agreement (2004), there is a clear division here between the EU as a “demander” and ESA as a “supplier.” The White Paper (2003) also notes that the EU should establish the European Space Policy as a “horizontal policy” and that the “responsibility for space could be a clearly attributed competence within the European Commission.” Furthermore, the Commission shall “elaborate in collaboration with ESA the first draft of the European Space Programme by the end of 2004” (European Commission 2003, 38). The White Paper (2003) also states that the Commission should “make use of ESA proposals for a network of technical centres combining available national and ESA capacities, including the roles of the partners and a timetable for their creation” (European Commission 2003, 38).

In the 2007 Council Resolution on the European Space Policy, the Council voiced its support for the “combined efforts of ESA and the European Union to implement large

user-oriented initiatives such as GMES and GALILEO” (Council of the European Union 2007, 4). It also welcomed “the beginning efforts for increased development and exploitation of space related integrated applications, including in particular satellite communication services” (Council of the European Union 2007, 4). The resolution underscores the important role the ESA has played in the space sector for more than 30 years. However, it also points out that it could “require further flexibility and some evolution”. Furthermore, it “calls on the European Commission to draw on the management and technical expertise of the ESA for managing European Community-funded R&D space infrastructure programmes, with the ESA coordinating the relevant agencies and entities in Europe” (Council of the European Union 2007, 6-7). According to the resolution, the ESA’s role should also include:

“supporting the European Commission as a technical expert in the elaboration of European Community initiatives involving space-related activities and relevant work programmes, and in the selection and monitoring of relevant work contractors, - the management by ESA of European Community space-related activities in accordance with the rules of the European Community.” (Council of the European Union 2007, 7)

In addition, it invites the Member states "to increase synergy between national, ESA and EC contributions” within current programmes. The resolution also underscores the “support for the continuation of the Framework Agreement beyond May 2008” as a foundation for cooperation between ESA and the European Community. Further improvements of the existing cooperation should therefore be made (Council of the European Union 2007, 7).

The Treaty of Lisbon (2007), which entered into force in 2009, provides the codification of the competences of the EU in the area of space. The preamble contains a new title setting down the “Categories and Areas of Union Competence.” Article 2C, paragraph 3, states that in a shared competence between the EU and the Member States,

“in the areas of research, technological development and space, the Union shall have competence to carry out activities, in particular to define and implement programmes: however, the exercise of that competence shall not result in Member States being prevented from exercising theirs.” (European Union 2007)

Furthermore, Article 172a, which was later inserted into the Lisbon Treaty, states that:

“to promote scientific and technical progress, industrial competitiveness and the implementation of its policies, the Union shall draw up a European Space Policy. To this end, it may promote joint initiatives, support research and technological development and coordinate the efforts needed for the exploration and exploitation of space.” (European Union 2007)

Article 172a. also contains the statement that “The Union shall establish any appropriate relations with the European Space Agency” (European Union 2007, Article 172a). The development of the EU and thus this article are both of major importance when considering the EU-ESA relationship and enhanced efforts for rapprochement. Article 189 of the TFEU gives the EU a mandate to create a European space policy and take appropriately related measures,² and it also indicates that the EU should establish appropriate relations with the ESA.

Meeting the Legal Dimension: Theory and Practice

As discussed, there are several agreements, declarations, and resolutions in place that provide a framework for cooperation and partnership. Moreover, the aims of joint project and enhanced cooperation are made relatively clear in various documents. It can thus be stated that all requirements of the “legal dimension” have been theoretically met. There are several agreements in place that regulate the EU-ESA relationship and stress enhanced cooperation. But whilst this may be the case, it is important to note that the goals set out in these frameworks or agreements may not necessarily be met in the “real world.” It is clear that many agreements still lack adequate implementation and/or must be reconsidered due to further changes in the EU and the ESA’s political and sectoral environments.

Dimension 3: Capacity-Building and Knowledge-Sharing

Capacity-building can be understood as the aim to enhance an organisation’s competence and effectiveness. Knowledge sharing is therefore crucial for the long-term capacity-building of an organisation. The EU and the ESA have both put an emphasis on cooperation in research and development. The European Strategy for space, adopted as a resolution by the Council in 2000, emphasises

“the respective roles of governments, the European Union and the European Space Agency (ESA) in supporting and consolidating research and development work in connection with space systems as well as the need for Europe to have a technological base and the related operational infrastructure enabling it to hold its own in global competition“ (Council of the European Union 2000).

² However, even though the Lisbon Treaty provided the EU with new space competences, national programmes still play an important role as a strong driver behind space activities, especially for industrial and national security reasons (Rieder et al. 2009, 134).

As such, research and development, as well as technological advancement all characterise EU-ESA cooperation. At the same time, a certain “division of labour” has been put in place and can be found in the Framework Agreement that entered into force in 2004.

Investment and funding are also important for the functioning of systems of collaboration and are particularly vital in areas like research and development. Although the EU is the ESA’s largest donor, which suggests close ties and a tendency to adaptation, or make concessions, the management of EU funding by the ESA has generated a number of obstacles. According to a Communication by the EC in 2012, management is “too complex, given the fact that the European Union and the ESA have different rules which must co-exist within the ESA” (European Commission 2012, 3). Moreover, it notes that “[f]or the implementation of EU programmes the ESA is obliged to follow EU rules and the strict principle of best value embodied in the EU Financial Regulation” (European Commission 2012, 3). According to the Commission, this has so far given rise to difficulties “whenever programmes are funded through mixed ESA and EU appropriations” (European Commission 2012, 3). The Commission’s 2014 report again stresses the growing financial involvement of the EU in space activities. In the new Multi-annual Financial Framework 2014-2020, “the EU is devoting close to €12bn to large-scale European space programmes such as Galileo, Copernicus, and to space research activities under Horizon 2020” (European Commission 2014, 3). This amount represents a doubling of the investments in the previous period. The increase in funding for space activities and research can be traced to the EU’s enhanced involvement on outer space matters on the one hand, but also suggests a drive for enhanced cooperation on the other. As the EU delegates around 75% of its space budget to the ESA (European Commission 2014, 3), this has an impact on the EU-ESA relationship. As the Commission states, the EU budget transferred to the ESA in the next seven-year period “will exceed the individual contributions of all ESA Member States” (European Commission 2014, 3). However, the funds provided by the EU are also subject to the EU Financial Regulation. There is thus a pressing “need for mechanisms that will guarantee that activities entrusted to the ESA deliver expected results and are being conducted and managed in the most efficient, effective and accountable manner,” which, according to the Commission, means “strictly following EU rules and procedures in an “EU-like” environment” (European Commission 2014, 3).

In the “Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions” (2016) the Commission also stresses that it will “give priority to action

addressing the vulnerability of European supply chains by supporting the development of critical space components, systems and technologies associated with technological non-dependence.” (European Commission 2016, 6) It plans to support “long-term R&D needs, including breakthrough disruptive technologies, low-cost and alternative access to space, and in-orbit servicing.” (European Commission 2016, 6) A willingness to support the “development of new industrial processes and production tools, and improve support to technological maturity, including in-orbit demonstration and validation activities, to reduce time to market”, is also stated (European Commission 2016, 6). In this communication, the Commission encourages future research activities through “horizontal synergies and multidisciplinary approaches that allow the cross-fertilisation of ideas and spinning-in/off of space and non-space technologies,” which should be achieved through “collaboration with existing initiatives, such as the European technology platforms and joint technology initiatives.” (European Commission 2016, 6) The communication goes on to highlight its aim to “step up its efforts to support space R&D activities in cooperation with Member States and the ESA, and to review its strategic approach to boosting the competitiveness of the European space sector” (European Commission 2016, 6). Finally, it plans, “together with Member States and ESA, [to] promote the use of common technology roadmaps to ensure greater complementarity of R&D projects” (European Commission 2016, 7).

Advanced R&D: Regulatory Complications?

The aim to enhance cooperation in research and development can be seen as a given. However, there is no clear evidence of exactly how this exchange of knowledge will be effectively implemented. No information on informal networks, for example, was contained within the material analysed. The “division of labour” is also clear, as documents like the Framework Agreement lay down different roles for the two organisations. Finally, a drive for further funding and investment is also apparent, but it continues to present several obstacles, as previously discussed.

Knowledge-sharing between the ESA and the EU takes place on different levels. In the domain of technology and innovation, knowledge sharing is especially crucial in advancing space programmes. The EU has clearly increased its budgetary expenditures on the ESA, and this can be seen as an increase in their joint efforts to build capacity and collaborate on research and development. However, “the mismatch of financial rules” (European Commission 2014, 4) is a possible constraint for further rapprochement, even if

evidence shows that both parties are generally interested in joint research initiatives and have established a common basis of knowledge-exchange and collaboration.

Dimension 4: Communication

Advocacy and communication are essential when defining the relationships between organisations. Effective communication is also an essential driver of enhanced cooperation and gradual approximation. Moreover, communication can also be considered to have a ‘spill-over’ effect. As communication is crucial to a wide range of fields and inherent to any kind of relationship, it takes place on many levels, often ‘external’ to documents like agreements and resolutions. Communication as a concept in itself cannot therefore be sufficiently analysed within this thesis. Notwithstanding the fact that communication is an essential and determining feature for rapprochement, the material used fails to provide extensive information on factors such as communication flows, negotiations, informal communications, and meetings. Nevertheless, further research revealed some evidence of communication mechanisms in the analysed documents. For example, Article 6 of the Framework Agreement also states that “[t]he Parties shall consult each other regularly in order to coordinate their activities to the fullest extent” (European Commission & European Space Agency 2004, Article 6.1.). This means that the exchange of information and consultation are considered an integral part of any efforts at collaboration. Moreover, the aim to “speak with one voice” in Europe is clearly stated in the 2003 Green Paper on European space policy (European Commission 2003, 15).

Holding meetings can be considered a vital method of communication and exchange. The meeting of the ESA Council at ministerial level and the EU Competitiveness Council on 25 November 2004 (European Space Agency 2014) can be given as an example. This meeting marked the first step towards an overall European space policy and its implementation programme. The “Space Council” meeting had been set up to coordinate and facilitate cooperative activities between the European Community and ESA and can be seen as a mechanism that enables dialogue and exchange.

Some documents also include evidence of efforts to establish joint communication mechanisms or enhance inter-organisation dialogue. For example, a 2016 Communication from the Commission outlines its aim to “strengthen its bilateral and multilateral space policy dialogues pursued closely with Member States. In cooperation with ESA, EUMETSAT and GSA it will review the strategic objectives of existing dialogues and set up new ones reflecting changing EU priorities.” (European Commission 2016, 11) This

Communication also mentions that the Commission will “actively promote EU space programmes and seek mutually beneficial partnerships for data exchanges under Copernicus and reciprocal participation in research programmes” (European Commission 2016, 11-12).

Lack of Data

As not enough data is readily available within the material studied, it can only be assumed that some of the indicators have been met. Steady communication flows, for example, could be an expected feature, but there is no clear evidence of this. The communication of common interests and/or goals can be considered as given, as many of the agreements, resolutions and declarations explicitly outline mutual goals and aims of the ESA and the EU. But the extent of informal communication, for example, cannot be discerned. The aim to establish reporting mechanisms was laid out, however there is little evidence to suggest that these have been put in place. In order to fully analyse concepts of communication, working papers and meeting protocols must be made more readily available.

Dimension 5: Coordination and Joint Projects

The EU and the ESA share various joint projects. The most prominent examples include the Galileo, the GSME, and the Copernicus project. Furthermore, a general will for enhanced cooperation is laid down in several papers and agreements. As stated previously, the 2003 Green Paper on European Space Policy, for example, points out that permanent institutional solutions should be introduced. Cooperation should not only be conducted on a project-by-project basis, but as a continuous norm. In addition, Article 172a of the Lisbon Treaty states that in order to promote scientific and technological progress, industrial competitiveness, and to pursue a European Space Policy, it “may promote joint initiatives, support research and technological development and coordinate the efforts needed for the exploration and exploitation of space”. It also states that the EU “shall establish any appropriate relations with the European Space Agency” (European Union 2007).

Concerning its joint projects, two programmes provide particularly crucial case studies: Galileo and GMES. Proposed by the European Commission in February 1999, GALILEO³ is the first large project jointly funded by the Union and the ESA (European Commission 2003, 11). Galileo is an international programme for radio navigation by

³ Galileo is the EU’s most expensive space programme and is often portrayed as “the European answer to the US General Positioning System (GPS)” (Sigalas 2012, 110).

satellite, and can be seen as the first major space project launched under the aegis of the EU (White Paper 2003). The initial idea was to establish a new form of public-private partnership where the development phase would be managed by a joint undertaking, comprising investors' representatives and, later on, private companies who would operate and manage the system under a concession scheme (European Commission 2003, 11).⁴

In 2001, the European Council called for the establishment "by 2008 [of] a European capacity for global monitoring of environment and security." As a response, the Global Monitoring for the Environment and Security (GMES)⁵ was set-up jointly by the Commission and the ESA "as an initiative to provide independent, operational, and relevant information in support of a range of policies serving sustainable objectives, such as environment, agriculture, fisheries, transport, regional development." (European Commission 2003, 12) In addition, it should "support objectives linked to the implementation of a Common Foreign and Security Policy as well as to early warning and rapid damage assessment in natural disasters." (European Commission 2003, 12) As stated in the Commission's White Paper (2003), GMES should ensure "Europe's interest in being an actor on the global scene, relying on independent means for gathering data and information." (European Commission 2003, 13) Preparatory activities have been undertaken by the Commission and by ESA in the context of the GMES Services Element programme (European Commission 2003, 13).⁶

Agreements between the ESA and the EU Commission have also been made to regulate financial and governmental issues in relation to the implementation of its projects.

⁴ Although Galileo should serve as a showcase for fruitful cooperation between the ESA and the EU, there have been several complications. Von der Dunk (2003), for example, highlights the fact that "the two institutions seem to be co-operating in a rather circumspect and complicated manner, which tastes more like competition than like co-operation." (Von der Dunk 2003, 83) The official representative of the ESA in the EU, Gulio Barbolani di Montauto, has put it in the following terms: "[i]n principle, what cannot be done at national level should come to the ESA for research and development. And now the third actor is the Commission, coming on top of that, with all the problems coming with it, of course. The Commission is not an organisation that is made for this kind of programme [Galileo]" (Sigalas 2012, 111). But some scholars like Froehlich (2010) suggest that the failure of the public-private-partnership "has opened up new ways of cooperation between the ESA and the EU" (Froehlich 2010, 1264). The ESA representative Gulio Barbolani di Montauto explained that: "we could have done Galileo by ourselves very quickly and less expensively. But without political support for standards, radio frequencies, applications and many other things, it would not be the same thing at all. We think it is essential to develop applications for citizens [and] to have the Commission and the European Union involved" (Sigalas 2012, 111). With the failure of the public-private partnership, the EU has taken over the sole responsibility for the financing (Hoerber 2012, 79).

⁵ GMES combines space and ground-based observation systems to monitor the environment and climate of Earth and the borders of the continent (Sigalas 2012, 110).

⁶ Nevertheless, the joint implementation of the programme did not go without obstacles. As Sigalas points out, during the course of implementing the GMES project „it turned out that the set of rules of each organisation could not simply be transferred to a co-project without alterations.“ (Sigalas 2012, 110) Thus, the Commission decided on 28 February 2008 that the agreement with ESA was interpreted as „consistent with the EU financial regulation in order to allow for a continuation of the project.“ (Froehlich 2010, 1264)

These agreements entail new forms of cooperation between the ESA and the EU. Although Galileo has faced various complications with financing in relation to the initial failure of the public private-partnership, it can also be argued that it has enhanced ties between the two parties. The GMES programme is another example of successful joint cooperation, which also supports common “objectives linked to the implementation of a Common Foreign and Security Policy as well as to early warning and rapid damage assessment in natural disasters” (European Commission 2003, 12).

When it comes to coordination mechanisms, the Council resolutions of 1998 and 1999 can both be seen as first cornerstone attempts to enforce synergies between the ESA and the EU (back then still the EEC) and to further develop a coherent European space strategy. In 2000, the European Strategy for Outer Space further emphasised the need for collaboratively establish conditions to stimulate private investment in the European space industry. It lays down that ESA and the EU should “seek to arrive at an efficient framework for cooperation whereby the ESA acts as the implementing agency for the development and procurement of the space segment and ground segment involved in the European Community's initiatives, giving the Union access to expertise, including the network of technical centres coordinated by the ESA.” This suggests that the ESA should serve as an “enabler” by acting as an “implementing agency.” It was also agreed that a “joint high-level Task Force” would be set up involving the Commission as well as the ESA Executive. The role of the Task Force was to further develop the European strategy in outer space and produce new proposals for implementation. In addition, the 2003 Green Paper on European Space Policy points out that the different abilities of the organisations should be combined to increase efficiency at a scientific and technological level, and to establish “permanent institutional solutions”. The “Space Council” meeting in November 2004 contributed to the implementation coordination activities between the ESA and the EU and aimed to facilitate future cooperative activities.

However, in a 2012 Communication titled “Establishing appropriate relations between the EU and the European Space Agency”, the Commission reports that the “ESA’s space activities lack a structural connection and coordination mechanism within the wider policy-making of the European Union” (European Commission 2012, 4). According to this Communication the “2004 EU/ESA Framework Agreement, in spite of its wide scope, does not provide for them” (European Commission 2012, 4). It is thus necessary for both organisations to agree on specific mechanisms for coordination and cooperation. The Commission further argues that “there is no formal mechanism at policy

level to ensure that initiatives taken within ESA are consistent with EU policies. This is of particular concern in international relations” (European Commission 2012, 4). A 2014 Commission report also notes that “[t]he lack of policy coordination mechanisms means that programmes are not necessarily aligned to support the larger policy objectives of the Union.” (European Commission 2014, 4) Furthermore, it states that “[t]he mechanisms envisaged in the existing EU/ESA framework agreement are not perceived as an effective tool for such coordination. The current framework does not lay out explicit mechanisms for concerted decision-making. Policies are thus coordinated only on programme level through mechanisms which need to be agreed upon programme per programme in a time-consuming manner. This absence of specific mechanisms for policy coordination could result in delays in launch of programmes.” (European Commission 2014, 4–5).

Joint Projects - No Coordination on a Policy-Level

Considering these different aspects, the evidence analysed shows that coordination mechanisms do exist to some extent, particularly, in the form of project coordination. On a policy level however, they are non-existent.

The planning and implementation of joint projects is also evident, as well as some harmonisation of work processes. In addition, it can be stated that a certain “division of labour” does exist, as laid down in the EU-ESA Framework Agreement of 2003.

It can therefore be argued that whilst several efforts have been made to establish joint cooperation and coordination mechanisms, there have also been challenges arising through closer collaboration. The aforementioned projects, however, do not necessarily suggest that these challenges have had a negative effect on the partnership itself. On the contrary, it seems that measures taken in order to overcome these problems have deepened cooperation, and thus led to even stronger overall rapprochement.

7. Outlook

The sources analysed in this thesis show that a rapprochement between the two organisations has been continuously initiated over the course of many years. In particular, the Framework Agreement (2004) can be considered a “milestone” in bringing the ESA and the EU closer together, as it aims to create the “coherent and progressive development of an overall European Space Policy”, that should “seek to link demand for services and applications using space systems in support of EU policies with the supply through ESA of space systems and infrastructures necessary to meet that demand” (European Union & European Space Agency 2004, Article 1). It also outlines the need for “efficient and mutually beneficial cooperation” between the two organisations, and it distinguishes between the different “roles” of the parties, characterising ESA as the “supplier” and the EU as the “demander” (European Union & European Space Agency 2004). The Treaty of Lisbon, which extended the competences of the EU into the area of space, can also be considered another major step towards rapprochement between the organisations. The promotion of joint initiatives and the coordination of efforts under Article 172a, as well as the sentence “The Union shall establish any appropriate relations with the European Space Agency” clearly highlight the EU’s desire to push towards deeper rapprochement with the ESA. However, researchers like Sigalas (2012) have posed a legitimate question: “[i]f the Commission was not designed to be the executive on space policy matters, and if European states were already cooperating more or less successfully within the institutional framework of the ESA, then why was the EU brought in?”

One answer to this could be the financial requirements for space related programmes, which are “by definition expensive”. The EU has the financial resources to make a programme feasible. In addition, non-ESA members profit from space programmes implemented by the EU and the ESA, as the funding stems directly from the EU budget (Sigalas 2012, 112). As Sigalas (2012, 111) points out, instead of “signing numerous international treaties to regulate all the space-related matters”, which is a complex process, “the EU member states could rely on the institutional infrastructure and procedures they had already built at the supranational level.” Furthermore, competition with other space-faring nations such as USA, Russia, India and China is nearly impossible without an element of joint cooperation and an adequate budget. As Sigalas (2012, 111) suggests, the political and economic weight of the EU puts member states in a better position to negotiate on matters of space exploration with historically more dominant countries like the USA.

However, it is important to note that until the 1990s, any supra-nationalisation of space policy was considered a risky move (Sigalas 2012, 112). As space programmes are closely connected to the military, defence and security sector, they touch directly upon questions of national security and sovereignty (Sigalas 2012, 112). Many countries were therefore hesitant to pool resources and technology to supranational institutions. According to Sigalas, a turning point for the ESA was the war in Yugoslavia in the early 1990s, and subsequent NATO bombing (Sigalas 2012, 112). GPS signals were downgraded during the US military operations in order to secure their missions. European countries thus realised that the GPS service was too important to be left in the hands of non-European actors (Sigalas 2012, 112). As such one could argue that competition with other nations in the fields of technology and intelligence is an important factor that led to further rapprochement within the European space arena.

Another important factor mentioned by Sigalas (2012) was the eastern enlargement of the EU in 2004. Having 10 new member states gave the Commission as well as the European Parliament better arguments for the necessity of a space policy beyond the limits of the ESA's existing frameworks (Sigalas 2012, 112). In this context, it is important to note that the ESA and the EU's membership do not necessarily overlap. A common European space policy would help to bridge the gap between Western and Eastern EU members, as well as between members and non-members of ESA (Sigalas 2012, 112). In addition, the prevailing importance of the "cost-benefit rationale" helps explain "why EU member states eventually consented to a European space policy with an EU dimension, which culminated in granting explicit space competences to the EU in the Lisbon Treaty" (Sigalas 2012, 112).

The enhanced cooperation between the EU and the ESA is clearly driven by the EU's desire to bring ESA under the EU framework. According to the European Commission, "[t]he need for a greater operational efficiency, symmetry in defence and security matters, political coordination and accountability can only be resolved, in the long term, through the rapprochement of ESA towards the European Union" (European Commission 2012, 4). The EU aims to achieve this using various measures. According to the 2012 Commission Communication, "a clear target date should be set between 2020 and 2025 for this long term objective" (European Commission 2012, 4). The options presented by the Commission to create enhanced rapprochement include "improved cooperation under the "status quo", bringing the ESA as an intergovernmental organisation under the authority of the European Union" or "transforming the ESA into an EU agency" (European

Commission 2012, 4). All presented options entail the ESA gradually adapting to the EU's frameworks. However, the Commission also notes that "in the meantime, it is possible to ensure a well-functioning cohabitation between EU and the ESA that can help achieving the long-term objective of rapprochement" (European Commission 2012, 4).

Drawing on the EC Communication (2012), the 2014 Commission report, titled the "Progress report on establishing appropriate relations between the European Union and the European Space Agency (ESA)", offers four possible scenarios for the future of EU-ESA relations. The first option is to maintain the current status quo. The second option outlines improved cooperation within the current status quo. This means that the EU and ESA remain two separate entities, with a potential improvement of delegation agreements. Furthermore, specific mechanisms for coordination would be put in place. The third option involves the creation of "a programmatic structure solely dedicated to the management of EU programmes (i.e. "EU pillar")" (European Commission 2014, 6). Within the "EU pillar", issues of membership asymmetry would be resolved. The "EU pillar" would be "hosted" within the ESA, creating an "EU-like environment" and representing a step towards greater efficiency (European Commission 2014, 6). The fourth option suggests that the ESA become an "EU agency whilst preserving some of its intergovernmental features." This option would turn the ESA into an EU agency with a legal foundation in EU law and regulations (European Commission 2014, 6). According to the Commission's evaluation of these options, only three and four would solve the current "limitations" that the EU-ESA relationship faces (European Commission 2014, 7). Concerted decision making, for example, "is expected to remain an issue unless ESA becomes an EU agency" (European Commission 2014). However, taking "costs" and "effectiveness" into account, options two and three seem to be the most feasible in reality. Neither option requires as many changes in internal and external regulations, and both are less contingent on political consensus "which may be difficult to reach in the foreseeable future" (European Commission 2014, 7). Whilst it considers three and four to be the best solutions to current problems within EU-ESA relations, the EU ultimately favours option two alongside option three.

The EU's position shows that their aims for the deepening of the EU-ESA relationship would eventually lead to the ESA becoming a part of the EU framework. However, this desire has so far been constrained by the various challenges caused by conflicting policy-making regulations and problems of finance. Moreover, the ESA itself has not officially indicated any willingness to become part of the EU framework thus far. It

is therefore a question of power, and it is clear that asymmetries of power will determine the future relationship between the ESA and the EU. However, it can be argued that the growth in future competition and increasing operational challenges on a global scale will also have a decisive impact on future EU-ESA rapprochement. Finally, emerging alternatives matter too, with the private space sector developing and expanding each year.

8. Conclusion

The findings of this thesis indicate that there have been several attempts to bring the ESA into the EU-framework. The documents analysed show us that ties and linkages between the two organisations have grown stronger over the last two decades, and that the need for a uniform European space policy has been stressed (in particular by the EU) on several occasions. The different dimensions used in the analysis suggest that many aspects of rapprochement have already been met. However, it is also clear that there are still some obstacles that have so far hindered a greater convergence between the two organisations.

The existing rapprochement between the ESA and the EU can be explained by several factors. First and foremost, it can be explained by the extended competences of the EU through the Lisbon Treaty and its endeavour to enhance outer space activities. Consequently, this has led to the EU's need for 'know-how' in the field of space, as it has not yet developed its own expertise. This makes the EU dependent on collaboration with the ESA, which is more experienced in the launch of space vehicles and provides technological expertise. Moreover, international competition with other space faring nations is a driving force behind enhanced cooperation between the two organisations. In addition to this, both technological developments and the fact that societies have grown increasingly dependent on space (in particular in regard to climate-related issues, navigation systems, and telecommunication) can also be seen as additional "push-factors" for joint undertakings.

The cost-benefit rationale is a further plausible explanation for this. Space related programmes are by definition expensive and depend on consistent funding. In this respect, it is important again to highlight that the EU is ESA's single largest budgetary contributor. These strong economic ties point towards a certain asymmetry in their relationship. As the ESA is dependent on the financial support of the European Union, it is more likely to make concessions to meet EU demands or requirements.

However, multiple factors also demonstrate that a ‘unification’ between the ESA and the EU has not yet been achieved. This can be traced back to fundamental differences in their administrative structures and regulatory frameworks. One decisive issue is the difference in state membership of each organisation. As not all ESA-members are EU members, closer rapprochement could prove to create obstacles when policy-making in the future. The EU’s push to link European space activities more closely with the Common Security and Defence Policy (CSDP), for example, can be seen as a sign of the diverging interests of the two organisations.

In this respect, common aims and values can play an important role, and the willingness of the ESA to align more closely with the EU can only be partly affirmed. Although the ESA agrees on enhanced collaboration and stresses the importance of a unified European space policy, it has not explicitly indicated that it is ready to be incorporated into the EU framework. This reluctance can be partly explained by the potentially high costs of losing their autonomy. Such a move will depend on the availability of alternative means of cooperation between the two organisations. Indeed, the emerging private sector in European space exploration could lead to a foundational shift in how these problems are resolved in future.

As the ESA and the EU cannot be seen as classical competitors in the “space market” due to their internal structures, many of the economic theories used to explain inter-organisational relations do not apply. The relationship between the two organisations is complex and occurs at many different levels. The findings of this research confirm that a multi-level approach is necessary when examining the different factors that drive or hinder rapprochement. The analysis conducted can therefore be considered a starting point for further research in this field.

The case of the EU-ESA relationship shows us that rapprochement is dependent on various internal as well as external factors, but it is also clear that power asymmetries and financial resources are crucial issues that can influence the nature of rapprochement overall.

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On my honour as a student of the Diplomatic Academy of Vienna, I submit this work in good faith and pledge that I have neither given nor received unauthorized assistance on it.

A handwritten signature in black ink, consisting of several loops and flourishes, positioned below the text.