

Structure and leadership behaviours: a combined approach to analysing perceived network effectiveness

A Master's thesis into network effectiveness of IMPEL, in relation to its structure and leadership behaviours, as perceived by individual participants of the network

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Summary

Network governance has seen widespread use in many public policy fields, whereby multiple agencies or organizations work in governance networks on cross-boundary collaborative activities. The European Union in particular showcases adoption of governance networks to deal with increasingly transnational wicked problems. Research on effectiveness of network collaboration show that both the structure and leadership behaviour determine elements of effectiveness of such networks. This thesis aims to contribute to the literature on network effectiveness through an in-depth investigation into the internal dynamics of networks in relation to how structure and leadership behaviours is perceived to determine effectiveness in governance networks. The general research question this thesis aims to answer is thereby as follows: *How do the dimensions of structure and leadership behaviour of governance networks, jointly determine members' perceptions of network effectiveness?*

The main research question is addressed by breaking it down into three sub questions: (1) What forms the perceived effectiveness of participants in their network? (2) How does the structural dimension in network governance influence the perception of effectiveness of network participants? (3) How does the leadership behavioural dimension in network governance influence the perception of effectiveness of its participants?

To fulfil this aim, a qualitative case study is performed on perceptions of participants of the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL), to see how they perceive the effectiveness of their network. The specific case of IMPEL provides insights on how effectiveness is determined in a voluntary network specifically concerned with acting as a bridge for professionals and sharing knowledge in the transnational and European setting. The units of study were participants from different member organisations in 11 countries that held a central role in the network, either as National Coordinator or as experienced member within the network. The perceptions of the participants in this research are their own personal reflections on the effectiveness of the network to themselves, the member organisation they are from and the network as whole.

The findings show that participants' perception of effectiveness is dependent on how the network provides opportunities of learning, exchanging knowledge, and exerting influence on the policy process at the practitioner's level. The perception of the effectiveness of the network in providing this, is found to be determined by multiple factors of structure and leadership behaviours. For structure five determinants related to network structure as conceptualised by

Turrini et al. (2010) are examined. These include external control, integration mechanism and tools, size and membership composition, formalization and accountability, and network inner stability.

External control refers to the influence by or dependence on actors outside the internal network. Respondents differ in their perceptions on the potential and experienced influence of the funding by Commission. Some respondents state that while the network has become mostly reliant on Commission funding, the network should make sure it continues to work based on what members want. Others see the influence by the Commission through funding as something that is either part of the game or even positive for effectiveness due to the strategic view it provides. This tension between staying an independent voluntary network on the one hand and professionalizing and developing a more strategic approach on the other, reflects the possible tension between what is effective to members and what is effective to the whole network.

Integration mechanisms are the means of collaboration that can support the effectiveness of joint operations by serving as integration mechanisms. The networks' main form of engagement are the expert teams in which members participate in projects, that splits the network into subgroups under central coordination of the board and expert team leaders. Although this is not the most striking finding, the overall positive perception of the general structure of the network forms a major part of the perceived effectiveness of the network. The effectiveness is thereby dependent on how tools and lessons from these teams are translated to the member organisation or other professionals in respective home countries. The peer review mechanism that is used forms one of the few ways in which participants of the network engage with the broader member organisations instead of single participants. This helps the network integrate past the level of participants with the high-level management of the member organisations, whose support is necessary for continuous commitment to the network.

The size and composition concern the effects of the membership in terms of the breadth and diversity of the membership on effectiveness. Respondents mention that they gain a lot from the diversity of the different entities in IMPEL. Both the diversity in terms of the areas of environmental issues covered in the network, as well as the different backgrounds and expertise of members, have a positive influence on the perceived effectiveness. As the network grows however, more diversity of members makes it increasingly difficult to ensure the effectiveness of shared activities for everyone. Diversity can create further tension when the decision-making structures do not match the growing size and composition. More specifically, it is found increasingly difficult to find a voting mechanism that caters to all the different members, as

some members represent a single organisation and others represent many as centralised umbrella organisation in their respective country.

The formalization and accountability mechanisms refer to how the rules and governance of the network itself influence the effectiveness of network. Feelings of keeping the network independent and of being able to influence the network are important to many respondents. Respondents state they are all equal in the network, that they can voice concerns if they want to and that decisions are made democratically. For shared governance to remain effective however, multiple conditions are found to be necessary in the literature: strong connections among participants, equal contributions in time and effort, equal input in decisions, consensus about network goals, limited need for network-level competencies. As IMPEL is growing and finds itself in a transition phase where the governance is being adapted to professionalize further, tensions arise with the participant-governed form of governance. As discussed, the increased diversity and size make it increasingly difficult to find consensus within the network. This specifically relates to the agenda setting and the distribution of efforts in the network as it becomes more difficult to unite a bottom-up approach of shared governance with a more central and strategic approach. In line with the studied literature the findings show that in shared governance there tends to be enthusiasm among members at first, but as the network grows with participants that vary in capacity, the division of labour becomes more skewed. As the network becomes larger and more formalised and professional, there is also the need for more network level competencies that need to come from the members. This forms a tension because members value staying participant-governed, but there is also a demand for more strategic and central forms of governance to lead an increasingly complex network.

The network inner stability refers to the stability of the participants in the network and their shared social capital in terms of trust and strength of connections in the network. Overall, there is a high density in terms of trust amongst participants that is considered to have a positive influence on effectiveness. With the large breadth of membership however, there are considerable differences in capacity of participants to contribute to the network making it difficult to professionalise further and continue to engage in shared activities. The growth of the network demands more network level competencies and dedicated time, but this runs up against the wall of the voluntary nature of the network structure. This threatens the network inner stability as participants are unable to volunteer for the increasingly demanding leadership positions.

For the behavioural dimension the focus is placed on four general network leadership behaviours of activation, framing, mobilising, and synthesising, as conceptualised by Agranoff & McGuire (2001). These behaviours are empirically found to intervene within network structures and have a positive influence on determining the effectiveness of a network.

Activation refers to a set of behaviours for identifying and incorporating people in the network with the right knowledge and resources for projects and activating them to join in network activities. Due to the voluntary nature of the network, there is need to activate and motivate people to participate in projects of the network. Network participants have a role in doing so, but it becomes more difficult if participants are not part of the organisation in which they need to activate people to join IMPEL projects. A beneficial leadership behaviour by the formal leadership that is identified is best described as a form of ambassador behaviour, whereby the formal leadership of the network physically visits member organisations to engage with their high-level management to activate or reactive their participation.

The act of framing refers to behaviours that influences the structure in such a way that it facilitates more effective interaction in the network by influencing the operating rules, network processes, the prevailing values and norms, and the perceptions of the participants in the network in such a way that it improves effectiveness. Respondents indicate that the effectiveness of the network ultimately depends on the internal mechanism for transferring the results inside your organisation, but that they are not always present. Effective framing therefore entails adapting the structure to help transfer the lessons and output of the network to the immediate surroundings, for example by setting up a structure among participants from individual countries. Another effective form of framing mentioned is linked to leveraging the peer review system mentioned earlier, as tool for creating contact between the participants of the network and the high-level management of other member organisations. This in turn can increase the effectiveness by better understanding the actual organisations and backgrounds of participants throughout the network.

Mobilising behaviours refer to developing commitment and support for network processes among network members and participants. Within IMPEL, such behaviours are found to be especially important for connecting the external surrounding to the network. Effective mobilisation by network participants can be done by acting as ambassador of the network in their organisation and country through actively transferring the lessons and output of the network to a larger community. Externally the formal leadership also plays an important role in making the network known to external stakeholders and mobilising new members.

Synthesising refers to behaviours and actions that positively influence effectiveness by strengthening relationships and interactions, which in turn helps to build trust through managing risks, instability, and power imbalances. The findings do not indicate specific actions to be especially effective, but show that managers in networks such as IMPEL should practice diplomatic behaviour in order to synthesize effectively. To be able to so, someone needs to be experienced, both in the network and in the context of the practitioners in the field.

The findings of this study show how the dimensions of structure and leadership behaviour of governance networks, jointly determine members' perceptions of network effectiveness. They show that different tensions are perceived in relation to effectiveness that arise as the network grows and matures, whilst remaining structured as a voluntary network governed by its members. This study brings the combined approach suggested by Turrini et al. 2010 into practice by looking at a range of structural factors and examining management behaviours that both shape the perceived effectiveness in networks in voluntary transnational network. Future research can help to further substantiate a combined approach into more network contexts. Based on the findings of this research, IMPEL should strike a balance between its voluntary nature and becoming an increasingly professional network.

Acknowledgements

The thesis that lays in front of you forms a personal milestone within my academic studies and marks the completion of the master's program in International Public Management and Public Policy. It has been a challenging pursuit as I felt insecure whether I could pull it off. I am proud that eventually with the help of many people along the way, I got to find a topic close to my personal interest without even realising it at first. During the process I was automatically drawn to what I find most interesting, the way in which people interact with each other and how this always turns out to define what ultimately happens in the world. The study thereby offers insight into how people collaborate internationally and the perceived successes and challenges that arise from shaping their efforts collectively.

With this research project, it long remained a question to me during the process what it exactly was what I wanted to find out. I want to thank my supervisor Adrià Albareda Sanz for helping to find this out with me, supporting me throughout the process. Furthermore, I would like to thank those people within IMPEL for granting me their trust for performing this study. Lastly, I want to express my enduring thanks to the many people who have given me support, my family and Emma in particular.

Summary	3
Acknowledgements.....	8
1 Introduction.....	11
1.1 This research	13
1.2 Relevance	15
1.3 Structural outline.....	17
2 Literature review	18
2.1 Network governance	18
2.2 Network effectiveness.....	20
2.3 Structural dimension	21
2.4 Behavioural dimension.....	23
2.5 Gap in the literature.....	25
3 Theoretical framework.....	27
3.1 Perceived effectiveness	27
3.2 Network structure.....	28
<i>External control.....</i>	<i>29</i>
<i>Integration mechanisms and tools.....</i>	<i>29</i>
<i>Size and composition</i>	<i>30</i>
<i>Formalisation and accountability</i>	<i>31</i>
<i>Network inner stability</i>	<i>31</i>
3.3 Network leadership behaviours.....	32
<i>Activation.....</i>	<i>33</i>
<i>Framing</i>	<i>33</i>
<i>Mobilising.....</i>	<i>33</i>
<i>Synthesising</i>	<i>34</i>
3.4 Final framework.....	34
4 Research design and data collection.....	37
4.1 Research approach	37
4.2 Case selection.....	38
4.3 Data collection and Analysis.....	40
4.4 Operationalisation	43
5 Analysis and discussion of findings	46
5.1 Overall perceived effectiveness	46
5.2 Structural dimension	49
<i>External control.....</i>	<i>49</i>
<i>Integration mechanisms and tools.....</i>	<i>51</i>
<i>Size and composition</i>	<i>53</i>
<i>Formalisation and accountability</i>	<i>56</i>
<i>Network inner stability</i>	<i>58</i>
5.3 Leadership behaviour dimension	59
<i>Activation.....</i>	<i>60</i>
<i>Framing</i>	<i>61</i>
<i>Mobilising.....</i>	<i>61</i>

<i>Synthesising</i>	62
6 Conclusion	64
7 References	66
8 Appendices	71
8.1 Respondents:	71
8.2 Topic/question list.....	71
8.3 Topic List Interview research IMPEL network	71

List of figures and tables

Figure 1: Basic model	14
Figure 2: Relationship variables network structure	35
Table 1: Expected relation between structure and network effectiveness	36
Table 2: Expected relation between leadership behaviours and network effectiveness	36

1 Introduction

Network governance has become the *modus operandi* in many public policy fields, in which societal governance takes place through network structures in which multiple organisations jointly shape the public domain. Whereas in the past societal governance was based on the state or the market, new forms of governance of society are now increasingly adopted through negotiated interaction between interdependent, but relatively autonomous actors. This pluricentric governance based on interdependence, negotiation, and trust has been embraced by both practitioners and academics (Sørensen & Torfing, 2007, p. 3). Formulation and implementation of policies now often takes place in an interactive form of governance between multiple stakeholders that can be public, semi-public and private actors. Governance networks form the actual public policy making and administrative structures involving multiple agencies or organizations with multiple linkages that work on cross-boundary collaborative activities (McGuire, 2002; McGuire and Agranoff, 2011). One of the expectations concerning this governance approach to public policy is that of improved policies. The interorganizational collaboration that takes place within networks is thought to increase the effectiveness with which society can deal with increasingly interwoven wicked problems (O’toole, 1997), by leveraging each other’s expertise, knowledge and resources. If network governance is used to improve the effectiveness of governance, it is relevant to see what elements of networks promote interactions that are leveraged in an effective way, and under what conditions. This in turn, can help to guide more effective applications of network governance across different contexts.

Studying what determines network effectiveness is not a novel pursuit and has seen continuous theoretical and empirical insights since the seminal article of Provan and Milward (1995). Their study looked at how the structure and context of networks determine their effectiveness. Empirical insights show how the breadth of membership can make it more difficult to collaborate in networks (Retrum, Chapman and Varda, 2013). The form of network governance that is adopted and management of tensions are other critical factors for explaining network effectiveness (Provan and Kenis, 2008). Continued research on determinants of network effectiveness as reviewed by Turrini et al. (2010) show that the way networks function through the behaviours inside the network, also determines network effectiveness. The way in which the network is governed thereby shapes how government officials and administrations at local, regional, national and supranational levels, can collaboratively shape public policy, goods and services.

Governance of networks concerns how such joint actions in public networks are coordinated and controlled by leveraging the different institutions and resources available in the network (Provan and Kenis, 2008, p. 231; Saz-Carranza and Ospina, 2010). This means that the structure on its own does not determine the effectiveness of a network, but is influenced by the leadership behaviours inside the network (Agranoff & McGuire, 2001; McSaz-Carranza and Ospina, 2010). While leadership in networks still involves the management and steering function of governments, it differs from leadership in single public organisations. Networks rely on ‘various leaders at various times performing various roles’ (McGuire, 2002, p. 600), that can all influence collectively the effectiveness of a network. Over time and at various levels managerial actions can facilitate network processes, which not only determine the effectiveness, but according to Turrini et al. (2010), also preserve and develop the superior advantage of networks in terms of the integration amongst members and inner stability of the network. In voluntary networks in particular, the behaviours inside the network are not determined top down, but by the way people participating in the network leverage the network structure and influence it to improve it. Therefore, network effectiveness in relation to those engaging in the network is likely not only determined by the network’s structure, but also by the behaviours of leaders inside the network.

The question of network effectiveness is especially important as the emergence of network governance is thought to better answer to the increasing international overlap of societal issues while there is a limited hierarchy in international politics (Sorensen and Torfing, 2007). The context of the European Union (EU) showcases a particular growth and increased complexity in network governance, as transnational governance is organised through various networks that cover the European Administrative Space. The European Commission in particular, is actively committing to governance through networks to improve effectiveness and simplify transnational policies (European Commission, 2001). This commitment to network governance has taken shape in the form of transnational regulatory networks, in which national regulatory authorities informally develop common best practice rules and procedures for regulation in different sectors (Eberlein and Grande, 2005). The governance that takes place between the national and supranational level is thereby not static or only formally delegated, but rather in the interaction of formal and informal institutions in the regulatory process (Eberlein & Grande, 2005). Since an important part of the integration of governance practices across the EU will not be found in Brussels but within governance networks, it is of value to see how these governance networks can encourage, accommodate, or inhibit more integration and harmonization of regulation across the EU. Regarding the effectiveness of European

transnational and regulatory networks, there is mostly a lack of attention in the literature to how the internal aspects of these networks determine the effectiveness (Mastenbroek & Martinsen, 2018; Vantaggiato et al., 2020) and to how participants perceive this. Since determinants of network effectiveness have been linked to both the network structure and the behaviours inside the network, it is relevant to focus on both dimensions to understand and explain network effectiveness in the transnational context of the European Union. The general research question this thesis aims to answer is thereby as follows: *How do the dimensions of structure and leadership behaviour of governance networks, jointly determine members' perceptions of network effectiveness?*

1.1 This research

The research aim in this thesis is twofold. First, to expand the literature on how structure and leadership behaviours within governance networks determine effectiveness as perceived by those participating in networks. Second and more specifically, to provide insight into how the internal dynamics explain effectiveness in the context of (European) transnational networks.

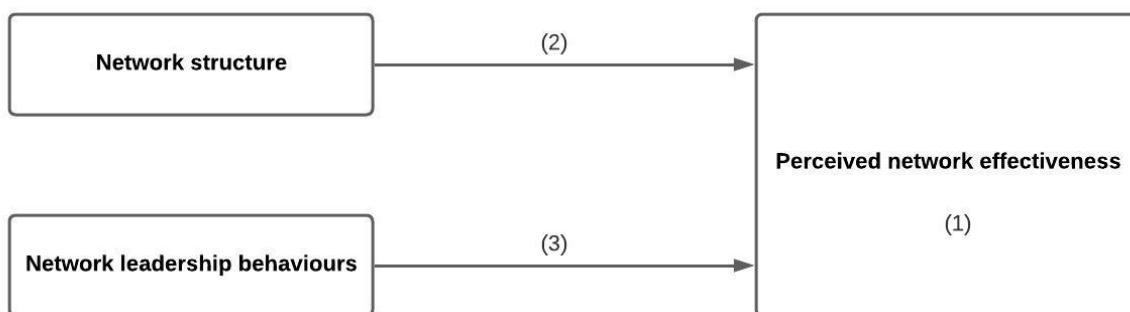
To fulfil this aim, a qualitative case study is performed on perceptions of participants of the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL). IMPEL is an international non-profit association of environmental authorities of the European Union Member States, acceding and candidate countries of the EU, EEA and EFTA countries and potential candidates to join the European Community (Impel, n.d.). As a consequence, the context of this study is characterized by a collaboration between relatively homogenous actors from different public environmental authorities from various levels of government, that collaborate in a voluntary network of practitioners. Given the voluntary and non-hierarchical nature of the network, perceptions of effectiveness will give a strong insight of how effective the network is, since this perception determines how much different members invest in the network collaboration (Hasnain-Wynia et al., 2003). Furthermore, the most fruitful way of gaining insight into the internal dynamics of a collaboration, is to see how it is perceived by those inside the collaboration.

For this reason, 14 semi-structured interviews were conducted with relevant participants from different member organisations and countries within IMPEL, to see how they perceive the effectiveness of their network. Participants were for example asked to what extent they feel they can effectively engage with the network, whether they feel they can access the agenda effectively and how they perceive the extent to which they can take part in decisions.

Furthermore, the goal is also to find out how the relationships to other members influence perceptions of effectiveness, for example through the composition of members and the stability of relationships. Similarly, the effects of leadership behaviours in both formal and informal terms are asked, for example in terms of how they activate and mobilise productive activity in the network and nurture the stability. Participants are asked to reflect on the effectiveness for themselves, their member organisations and the network as whole, both in general and with a specific focus on the relation to structure and leadership behaviour.

To do so, different determinants of network effectiveness related to network structure are used, as conceptualised by Turrini et al. (2010) to be formalization and accountability, integration mechanism and tools, external control, size and membership composition, and network inner stability. These elements cover a range of determinants related to network structure that are found in the literature to influence the effectiveness of governance networks. For the behavioural dimension the focus is placed on four general network leadership behaviours of activation, framing, mobilising, and synthesising, as conceptualised by Agranoff & McGuire (2001). These behaviours are empirically found to intervene within the network structure and have a positive influence on determining the effectiveness of a network. The expected relationship can be seen in basic terms as follows:

Figure 1: Basic model relationship network structure & leadership behaviours as determinants for perceived network effectiveness.



The main research question is addressed by breaking it down into three sub questions that are reflected in the model: namely (1) What forms the perceived effectiveness of participants in their network? (2) How does the structural dimension in network governance influence the perception of effectiveness of network participants? (3) How does the leadership behavioural dimension in network governance influence the perception of effectiveness of its participants? The first question aims to give a general perception of what is valued and expected from an

effective network, in relation to their experience in IMPEL. This forms a more descriptive question to understand the context of the case in more detail, by allowing for more inductive findings to come up about what participants see as important for perceiving networks of their type as effective. This provides a benchmark for the second question and third question to explore more specifically how the structure and leadership behaviours influence the effectiveness. For both dimensions the known determinants are covered during interviewing, whilst allowing for inductive findings as well. The dotted arrow between structure and leadership behaviour represents the possible interdependence between both dimensions hinted at in the literature.

By analysing the individual perceptions of participants on the effects of structure and leadership behaviour, this research aims to provide a more combined understanding of what determines effectiveness of governance networks. While the focus is on both structure and leadership behaviour within one study, a possible relationship between the dimensions of structure and leadership behaviours is represented by the dotted arrow going in both directions. This signifies the possible influence between the two dimensions, since the exact way in which leadership behaviours influence network effectiveness is likely determined by the structure and vice versa. Through the specific selection of the case of IMPEL, this thesis aims to also provide more context-bound insight on how this specifically works for voluntary and transnational networks.

1.2 Relevance

This thesis aims to contribute to the literature on network effectiveness through an internal view on how participants perceive the effectiveness of governance networks in relation to the internal functioning of their network. Whereby effectiveness and perceived effectiveness are often examined through a quantitative approach, the qualitative approach of this thesis allows for more in-depth investigation into the internal dynamics of networks in relation to both structural aspects and leadership behaviour. This thesis aims to advance the literature on determinants for network effectiveness by addressing three suggestions for future empirical research identified by Turrini et al. (2010) in their seminal meta-analysis of literature about determinants of network effectiveness. Firstly, it aims to empirically test their suggested combined model of structural and functioning characteristics by looking within one study how structural and leadership behaviour dimensions relate to each other and jointly determine network effectiveness. Secondly, it aims to give input for developing the mobilizing-activating-synthesizing-framing classification of leadership behaviours by Agranoff and McGuire (2001)

into more usable and operational measures. Thirdly, with the case of IMPEL as voluntary practitioners' network, it aims to fill the indicated gap of what structural forms can induce effective outcomes for networks that are specifically concerned with acting as a bridge for professionals and sharing knowledge.

Furthermore, most research concerned with determinants for network effectiveness related to structure or leadership behaviour, focused on local or national public health and community care networks. This makes sense as working in networks is common practice in these areas, thus providing a high number of networks that can be studied (Varda & Retrum, 2015). However, this limits the understanding of network effectiveness to a small subset of domains thereby overlooking the transnational context and EU context in particular, which also shows widespread adoption of network governance (Eberlein & Grande, 2005). The literature that does deal with European networks has, hitherto, mostly focused on explaining their functioning, their impact, and their normative implications (see Klijn, 2008; Levi-Faur, 2011; Mastebroek & Martinsen, 2018), through an external view on origins, objectives and outputs (Vantaggiato, Kassim & Wright, 2020). A behavioral understanding of the internal modus operandi of these networks is still needed (Hobolth & Martinsen, 2013). Variables of the internal organisation are necessary to unpack, if we are to understand how European networks can work effectively in the long run (Vantaggiato et al., 2020). O'toole and Meier (2004) addressed matching structure and managerial networking as determinants for performance in intergovernmental networks in the US, explicitly stating that a particular focus on such elements in intergovernmental or transnational networks is still empirically lacking. For these reasons, this thesis also aims to make an empirical contribution to the literature with its specific case by expanding insights on network effectiveness in a transnational setting. This in turn can advance the literature on transnational or intergovernmental network governance in general, and European governance networks specifically, with more elaborate insights on how the internal dynamics of collaboration in such networks can determine network effectiveness.

The study also aims to make a societal contribution by helping to better understand the effectiveness of governance networks. This is relevant to society, because effective network governance is essential to deal with the increasingly interwoven and complex wicked problems society faces. More specifically, the findings are relevant to those participating in any form of network governance as well as those in their immediate surroundings, as it can help to guide network participation into a more effective and beneficial activity. It can be especially pertinent to those in networks or setting up networks that in some way share characteristics with the case studied in this thesis. That is, networks that share any characteristics of being voluntary,

transnational and European, with aims of connecting professionals and sharing knowledge. The findings could help to understand what structural elements leadership behaviours foster an effective internal dynamic and network. Concerning the findings in relation to the context of the case, it can help to better understand how network governance can play an effective role within European governance, and how it can form an effective structure for integration and harmonisation across the EU.

1.3 Structural outline

This thesis will proceed as follows. First, the literature of network governance and effectiveness is reviewed to show the relation to current research and to further explain the indicated gaps this research addresses. Then, the theoretical framework that is used is discussed in depth, leading to the specific variables pertaining to structure and leadership behaviour. This is used to draw expectations about the relation between structure and leadership, and network effectiveness. The methods section explains the methodological choices and provides a further description of the case that is studied. The thesis will conclude with the analysis and discussion of the findings, after which conclusions are drawn and suggestions for future research are made.

2 Literature review

The literature review examines how this thesis relates to the existing body of literature in network governance and how it aims to contribute to it. Given the vast amount of literature on divergent aspects and implications of network governance, a brief connection is made before moving to the topic of interest, network effectiveness. Specific attention is given to how the internal dynamics of the collaboration have been addressed in the literature in relation to the effectiveness of networks. Lastly, this review discusses how, on the basis of the current literature, this thesis aims to contribute to understanding network effectiveness through a combined approach on structure and leadership behaviour in a transnational setting.

2.1 Network governance

The literature on networks, network partnerships and interorganisational collaboration that tries to understand and explain structures of collaborative governance, has been extensive and plentiful (see for a broad overview Sørensen and Torfing, 2007; Marcussen and Torfing, 2007; Klijn and Koppenjan, 2016). Different angles are taken on the conditions, functioning and implications of governance through networks. This form of governance has been studied under the term network governance, which are *'conscious steering attempts or strategies of actors within governance networks aimed at influencing interaction processes and the characteristics of these networks'* (Klijn and Koppenjan, 2016, p. 11). These actions of steering occur through a pluricentric mode of coordination and negotiation between a range of public, semi-public and private actors whose interaction forms a stable way of developing public policy (Sørensen and Torfing, 2007). The increase of complex networks with these specific structural characteristics in the governance process is seen as a response to the increasingly interwoven and complex nature of wicked problems (O'toole, 1997). This complexity forms an inherent characteristic of governance networks in which policies and services are developed to deal with societal problems (Klijn and Koppenjan, 2016). Governance networks itself can thereby be defined as the actual public policy making and administrative structures involving multiple agencies or organizations with multiple linkages that work on cross-boundary collaborative activities (McGuire, 2002; McGuire and Agranoff, 2011).

The literature on network governance often focusses on the implications of joining the efforts of civil society and private actors with governments to collectively promote a public purpose (Sørensen and Torfing 2007). While network governance in general may share many traits across settings and applications, it is likely to function differently depending on the setting

and type of network. In the review of Lecy et al. (2014) on the current scholarship on networks in public administration, they identify that key articles on governance networks use similar terms such as ‘policy network’ for describing different types of networks. There is a clear lack of defining exactly what type of network is being studied and what the boundaries and important properties are. This makes researching these networks challenging, as current findings are often too broad to effectively relate to practice or are presented as universal while being specific to the traits of the type of network being studied. This runs counter to the claim of Sørensen & Torfing (2007) that researching governance networks aims to be both empirical and explanatory, in the sense that the goal is to produce open-ended, context bound knowledge that is relevant for the engaged actors through theoretically informed analysis. This thesis aims to address these issues by being clear on the scope of the empirical findings through a qualitative single case study, in which the context and traits of the networks are extensively discussed forming an integral part to the study.

This thesis connects to the two overlapping clusters in public administration network literature as identified by Lecy et al., (2014), that of policy governance networks and policy implementation networks. Policy governance networks are explained as ‘*a response to complex policy problems that cannot be effectively addressed by a single actor*’ (ibid, p. 652), begging the question of why networks could deal more effectively with complex or wicked problems. Klijn, Koppenjan and Termeer (1995, p. 439) define it as ‘*more or less stable patterns of social relations between mutually dependent actors which form themselves around policy problems or clusters of resources and which are formed, maintained and changed by a series of games*’. They explain how networks arise as the framework in which multiple actors interact through games around specific policy fields. The focus is thereby on both the actors as well as the rules and procedures that structure the ‘games’ actors have amongst each other. The structure is what regulates the behaviour of the actors in networks by specifying how actors interact, who can interact, and in which way decisions are made and accountability is determined. Lecy et al. (2014) make reference to Agranoff and McGuire (2001) who raise questions on how accountability, trust and power play an important role in structuring the interactions within networks, and Romzek and Johnston (2005) who indicate that effective accountability measures look different in settings that are dependent on cooperation and collaboration.

The overlapping body of literature on policy implementation networks has focused more on public service delivery networks, whereby the question of efficiency and efficacy or effectiveness is of primacy concern (Lecy et al, 2014). The prevailing view is that networks improve effectiveness through reducing fragmentations and greater coordination. The focus of

research on implementation networks has been on how collaborative management practices and managerial challenges in a networked setting can determine the performance of networks in addressing issues such as health, social care, local development, and education (Turrini et al., 2010).

Similarly, this plays a role in governance networks where the governance process of formulation and re-formulation is influenced by the internal dynamics and management issues that arise (Lecy et al. 2014). The structure in which this takes place in networks is not static and is reshaped by the actors who behave on the basis of their perceptions that are developed over time. It is these perceptions that shape how actors choose to participate in the games or interactions in the network, what they expect to get out of the network by participating and which strategies they choose to get this. The outcomes are therefore not determined by structure on its own, but also by the behaviours within this structure that also change the characteristics of the network over time (Klijn et al., 1995). Lecy et al. (2014) therefore state that in order to understand how networks work, it is important to also look at the informal exchanges within networks through stakeholder or participant-based analyses into the perceptions on internal dynamics within networks. to which this thesis aims to contribute.

2.2 Network effectiveness

If the internal dynamics through structure and behaviour determine outcomes in networks, the question remains how these elements determine the effectiveness. The literature on network effectiveness has vastly expanded since the seminal article of Provan and Milward (1995), where they introduced a preliminary model based on conclusions drawn from comparing four mental care networks in the United States. Through assessing perceptions of the key stakeholders on the effectiveness for the intended community, they claim that network effectiveness is determined by structural characteristics as independent variables with context as moderating factor. They argue for example that networks are perceived to be more effective under structural conditions of centralized integration and direct external control. Studying and explaining network effectiveness in a uniform manner has remained difficult due to the multidimensional and normative nature of network, since it could mean different things to different actors, networks, and sectors (Kenis and Provan, 2009).

Provan and Milward (2001) argue that network effectiveness needs to be considered at the community, member and network level. While effectiveness considered at all levels is regarded as ideal, it has proven difficult empirically. Most articles therefore tend to reason why their selected level(s) of analysis holds most explanatory power for overall network

effectiveness, depending on the goals of their research (Raab et al., 2015). Similarly, it has proven difficult to come to a uniform form of measurement as dependent variable. Looking at attainment of goals or objective outputs is problematic as participants in networks define effectiveness differently and adapt their perception and objectives interactively (McGuire and Silvia (2009, p. 36). Given the focus on the internal effectiveness of the collaboration of this thesis, network effectiveness is approached as effectiveness to the community or society as ‘the cumulative outcome of processes and results on the organizational and network levels’ (Raab et al., 2015, p. 485). This reflects the societal impact of the effectiveness of the internal collaboration, as perceived by participants interacting with each other within their network.

2.3 Structural dimension

The impact of structure in relation to effectiveness has had considerable attention after the model of Provan and Milward (1995), with other articles debating which characteristics are most determinant. Retrum et al., (2013) for example found through quantitative analysis of US public health networks that a high density of ties between members improves effectiveness, but a wider breadth of membership creates challenges in reaching such density and consensus between members. Similarly, Wang (2015) found in small neighborhood networks in Beijing that network density was more important than networks being centrally coordinated.

Others claim a more configurational approach to structure is beneficial for analysing effectiveness. Raab et al. (2015) aimed to do this through a qualitative comparative analysis of 39 crime prevention networks in the Netherlands, finding that network effectiveness was achieved when networks were centrally integrated, in existence for three years and perceived as stable. A configurational approach however proves difficult, as universal theory for an effective structural configuration would neglect the situational and contextual differences between networks.

A contingency approach could therefore be more useful, such as that proposed by Provan and Kenis (2008) by arguing that depending on the form of governance that is adopted, specific contingent conditions and tensions are likely to affect the effectiveness of the governance structure. They indicate that for a network where the governance is shared among participants, a high density of trust is needed to be effective. In such networks participants will only be committed to the network and its goals if they all participate and made decisions on an equal basis. They argue that more brokered or centralised forms of governance through a lead organisation or a Network Administrative Organisation (NAO), become more effective options

as networks become bigger, as trust is less densely distributed, as network goal consensus declines, and as the need for network-level competencies increase.

Related to the forms of governance are network tensions between conflicting elements of the network that are both crucial for network effectiveness. Provan and Kenis (2008) distinguish tensions between efficiency versus inclusiveness, internal versus external legitimacy, and flexibility versus stability. An efficient form of governance and decision making is necessary for the network to be effective, but when governance is shared among participants they also need to be involved through inclusive decision making. This can compromise efficiency, as the need for building consensus makes decision making more difficult and time-consuming. In shared-governed systems, participants may contribute enthusiastically at first, but when a small subset of participants end up doing most of the work this can lead to a drop in enthusiasm, more frustration and a burn-out of participants as involvement demands an increasing amount of time and energy. Taking on a more brokered (led by one or a few members) or central form of governance can reduce these negative effects and increase efficiency, but compromises on the inclusiveness of opinions.

Similarly, there can be a tension between developing internal legitimacy among participants in the sense that participants see their efforts as legitimate and beneficial, and developing external legitimacy. While both can positively influence effectiveness, it is likely that catering to internal needs of all participants can compromise on building effective external legitimacy with a more centralised body representing the network externally, and vice versa.

Lastly, there is a tension found in the need for both flexibility and stability for network effectiveness. The flexibility is a unique quality of networks in the sense that they are more loosely bound than single organisations, but networks also need stability to maintain internal and external legitimacy, develop long-term relationships and develop common experience and know-how to maximize the effectiveness of a network.

Depending on the form of governance one side of each tension will be favoured, but developing a governance structure that is both stable and flexible is important for the effectiveness of the network. This can be done by frequently adapting the structure and procedures continuously, based on what is needed. These tensions show that determinants of network effectiveness cannot be assessed one dimensionally in a meaningful way, as effectiveness in one area can compromise on effectiveness in another. Striking a balance between different elements that are important for networks to be effective is thus dependent on the form of governance and continuous adaption of the network structure.

The meta-analysis on determinants of network effectiveness performed by Turrini et al. (2010) helps to cluster the current scholarship into five broad areas of determinants of network effectiveness that are in some way related to structural aspects. These include external control, integration mechanisms and tools, size and composition, formalisation and accountability, and network inner stability. This distinction continues the focus on structure whilst incorporating multiple conditions such as membership composition, stability and trust. In doing so, it provides a more systematic way of analysing the different structural aspects that can influence network effectiveness across networks. It still needs to be empirically used and operationalised in different contexts however, to test if it holds any merit in practice.

2.4 Behavioural dimension

Another body of literature has focussed on behaviours and conditions necessary for effective collaborative processes within networks. A range of different approaches and variables have been used to examine specific cases, therefore lacking any systematic way used across cases. Whelan (2011) for example in a study on national security networks in Australia, qualitatively captured the internal dynamics by focussing on conditions that promote effectiveness related to structure, culture, policy, technology, and relationships. Vangen et al. (2015) suggested in a longitudinal case study of networks concerned with neighbourhood regeneration, to look to structure as well as processes and actors. A focus on actors or participants as used by Vada and Retrum (2015), showed that higher trust and resource contribution predicted higher levels of perceived success among participants, while more resources and diversity predicted more disagreement about success. The broadened focus on processes has certainly increased the insights related to the internal aspects of networks, but it has resulted in an overflow of interconnected variables that have all been found to impact the collaboration in networks in some way. By means of illustration: Ansell and Gash's (2008) model on collaborative governance includes variables of history of conflict, incentives for participation, power and resource imbalances, leadership and institutional design, as well as process related factors of trust building and development of commitment; Thomson and Perry (2006) focus on governance, administration, organizational autonomy, mutuality and norms; Ring and Van de Ven (1994) on trust building through negotiation, commitment and implementation. While this has brought about more insights on different processes and conditions of participants that are critical for network effectiveness, it lacks an overarching

analytical approach. More importantly also, it does not pay attention to the question of how this can be influenced

If the goal of generating insights on network effectiveness is to understand how they can be made more effective, it is surprising that most scholarship on networks favour empirical work on only on structure and process, and not on how these can be steered or managed effectively as well (McGuire and Silvia, 2009; Saz-Carranza and Ospina 2010). Some insights have been generated on leadership and management in networks, for example by Hasnain-Wynia et al (2003) who found that in community care networks in the US, members' perceptions that the leadership was ethical had a positive impact on perceived effectiveness, while leadership that was not able to keep the network focused had a negative impact on perceived effectiveness. Similarly, Chen (2008; 2010) found in networks for delivering family and children services that management that pays attention to resource sharing and trust building can promote network effectiveness. Agranoff and McGuire (2001) grouped leadership behaviours that managers inside networks can adopt to improve network effectiveness into activation, framing, mobilising and synthesising. Network leadership in this case refers to behaviours that could be exercised throughout the network, as networks '*rely on various leaders at various times performing various roles, all of which may be necessary for network effectiveness*' (McGuire, 2002, p. 600).

The distinction of leadership behaviours in this way is one of the few types of networking managerial work that have been developed, but it has only seen few empirical uses. McGuire and Silvia (2009) used it to quantitatively generate findings on more than 500 network leaders in local emergency networks. They show that network effectiveness is increased if a focus is put on mobilising external actors and synthesising the network through trust building, sharing information and looking out for personal welfare of network participants. They also state that if too much time is spent on framing or structural aspects, managers can focus less on these mobilising and synthesising behaviours. While their article empirically shows the value of distinguishing leadership behaviours in this way, it only looks at how leadership behaviours are perceived by the formal leaders themselves and not by the participants who are influenced by them. It also does not provide understanding of how managers throughout the network could take on such leadership behaviours. More empirical research into leadership behaviour that includes the perception of leadership behaviours by those participating in the network could help to fill the gap on how these leadership behaviours play out in the internal collaboration in the network.

As Turrini et al. (2010) pointed out, the activation-framing-mobilising-synthesising classification of leadership behaviour is still too difficult to operationalise or use by network managers to help them lead more effectively. One way of looking at how such behaviours could be adopted or used, is by how they can intervene in the structure of the network. There has however been limited empirical insight into how these management behaviours relate to the structural aspects of networks (McGuire, 2002). Provan and Kenis (2008) indicated that there is an important link between structure and leadership in addressing the tensions created by the structural characteristics of network, but not how managers or leaders should behave to so effectively. Saz-Carranza and Ospina (2010) addressed this gap by empirically showing that certain leadership behaviours can help address the structural tension between needing both diversity of membership and a united network to be effective. While striving for diversity and unity could easily lead to disunity and similarity, a balance of can be found through leadership behaviours that synthesize by bridging differences, frame basic agreements and procedures, and contribute to activating the network's or members' capacity. This forms a good addition to linking leadership behaviours to structural aspects, but it also leaves room for further insights to be generated since their study focused specifically on leadership performed by a NAO and not on shared governance.

2.5 Gap in the literature

Most studies on network effectiveness focus on structural determinants (see e.g. Provan and Milward, 1995; Retrum et al., 2013; Raab et al. 2015), including the processes that shape the structure. There seems to be a lack of a systematic approach to studying network effectiveness that can be continuously adapted to different network settings. If the goal of developing theories on network effectiveness is to come to a more universal understanding of what elements makes collaborating in networks effective, a more consistent approach to analyse determinants of effectiveness across networks is crucial. Furthermore, the attention given to structural aspects has generated limited insight into what can be done to steer such processes effectively or deal with tensions related to such structural aspects. Some studies have turned their attention towards leadership behaviours (see e.g. Agranoff and McGuire, 2001; Saz-Carranza and Ospina 2010; Hasnain-Wynia et al (2003), that can influence and determine network effectiveness by intervening in the network structure. While this has led to some classifications of leadership in networks, it is still limited and difficult to operationalise or use in practice. There is specifically a gap in how network leadership behaviours are practiced and

experienced by those participating throughout the network and in networks that are participant-governed instead of centrally by a NAO.

Most importantly however, there is a gap in the literature in the sense that most studies either focus on structural aspects or on behaviours in networks but do not consider both within one study. Following the recommendation of Turrini et al., (2010) this thesis therefore tries to address this gap through a combined approach whereby multiple structural characteristics and leadership behaviours are jointly considered to affect network effectiveness. The aim is thereby to come to a more systematic approach of analysing network effectiveness that can be used more consistently across cases. This in turn can help to also understand how leadership behaviours link to structure and vice versa, which can help to make distinctions of network leadership behaviour more tangible and network structural aspects more adaptable.

3 Theoretical framework

As established in the introduction and literature review, this research aims to analyse how both structure and leadership behaviours can determine the perceived effectiveness of networks. In this chapter, the variables selected on both structure and leadership behaviour are discussed to form a theoretical framework used for analysis. This includes justifying why they are used and drawing expectations from the literature on the different relationships to network effectiveness. Before doing so, the approach to network effectiveness as perceived effectiveness is first explained. An overview of the operationalisation of these variables is included in the methods section to guide the empirical analysis.

3.1 Perceived effectiveness

Network effectiveness is multidimensional, and the question of effectiveness is different depending on the level at which it is considered. Provan and Milward (2001) distinguish network effectiveness at the community, member and network level. This thesis aims to unpack different factors that relate to the collaboration of participants inside networks, which is why the focus is placed on the member and network level to assess effectiveness. Network effectiveness at the member level refers to how effective members can benefit from participating in the network to their own organisation and network effectiveness at the network level relates to the effectiveness of the network as a whole. The reason for using these levels is that they are most closely related to the effects of structure and leadership behaviour in terms of how they directly shape the collaboration of the different members, as well as the network as a whole. This in turn is equally valuable to the community, since effectiveness for society can be seen as *'the cumulative outcome of processes and results on the organizational and network levels'* (Raab et al., 2015, p. 485).

To assess network effectiveness at these two levels, the effectiveness is assessed through the perceptions of effectiveness of the participants involved in the collaboration. This is done because structure and leadership behaviours are thought to determine effectiveness, through the way they influence the effectiveness of the internal collaboration in the network. Using perceived effectiveness to understand network effectiveness specifically fits the case used for the empirical analysis as well, as member perceptions of network effectiveness are particularly strong predictors of network success in voluntary networks (Hasnain-Wynia et al., 2003). This distinction between member and network effectiveness serves the purpose of painting a broader picture of the effects on effectiveness, since participants are likely capable of reflecting on influences of structure and leadership on their own benefits as well as the effectiveness of the

network as a whole. Distinctions are therefore not necessarily made for the influence of each independent variable but are discussed when levels of effectiveness are at odds with each other, in which case these tensions become an influential factor on their own.

As established in the literature review, participants in networks define effectiveness differently and adapt their perception and objectives interactively (McGuire and Silvia, 2009). Therefore, perceived effectiveness is assessed in relation to how participants describe effectiveness themselves. In contrast to assessing effectiveness in relation to formal goal achievement, perceived effectiveness can only be understood in relation to what members can conceive their network to be and how potentially effective it could be. Although a distinction could be made between perceptions of members and the actual participants, at a more general level members need to believe that the partnership is effective as a whole and beneficial to the participating organizations to remain active and make meaningful contributions. Moreover, positive perceptions of effectiveness are associated with closer collaboration and informal interactions outside the network structure which likely to lead to increasing the effectiveness even more (Vantaggiato et al., 2020). As such, the internal perspective of participants forms a valuable measure for the effect of structure and leadership behaviours through the influence on the effectiveness of the internal collaboration.

3.2 Network structure

The structural dimension of determinants of network effectiveness is defined as the characteristics of how a network is structured that can have a determining effect on network effectiveness. Five characteristics as conceptualised by Turrini et al. 2010 are used as overarching variables that group many structural aspects found in the literature to be determinant for network effectiveness. These include external control, integration mechanisms and tools, size and composition, formalization and accountability, and network inner stability. These are used because they emerged from many articles on network effectiveness, making them likely to cover a wide array of influences from the structure that apply to most types of networks. It also serves the goal of moving from a sprawl of different conceptualisations towards a more systematic and consistent analytical approach of studying network effectiveness that can be used across networks. Each variable is described individually in further detail, with expectations drawn from the literature.

External control

External control refers to the influence by or dependence on actors outside the internal network. How this influence is exerted and by who is variously identified depending on the context in which the network operates. In the context of a transnational or European network, this could relate to any influence by actors from different countries outside the direct scope of the network or for example actors related to the European Union. External control could for example be exercised more directly by participation of non-members via an administrative organisation in the network, funding by governments or the EU. Drawing on the literature, direct external funding is likely to lead to more effectiveness than disperse funding (O'Toole and Meier, 2004b), because it lowers probability of free riding by members in the network or using funds ineffectively.

Perceptions on the influence of external control can differ among members when certain outside control is in favour of specific members, referred to as the dark side of managing networks (O'toole and Meier, 2004a), resulting in different perceptions among members of the effectiveness of control. Since governance networks perform a function in the policy process and accountability in networks is less formal, external influence could be used to induce policy shifts or diversions through the network. It is difficult to draw a simple positive or negative expectation on the influence of external control on network effectiveness, since it likely depends on the perspective one has on the desirability of external influences. The variable is therefore loosely used to analyse how control is structured in the network and how it influences members' perception on the ability of the network to be effective in reaching its goals and for how they benefit effectively.

Integration mechanisms and tools

The integration and coordination mechanisms refer to critical mechanisms that provide an integrated structure for members of the network to collaborate. Integration through some form of central coordination with different sub-sets that are cohesive and strongly linked has been found to have a positive support effectiveness. Furthermore, integration mechanisms can include common information and communication systems, joint staff activities, joint funding and joint planning. Taken together, these mechanisms could lead to a higher degree of network effectiveness if they are perceived to aid the network and its members in integrating and coordinating common activities. If they bind perspectives, knowledge and skills of different member of the network these mechanisms of collaboration form the vehicles for synergies

among members of the network necessary for the network to be effective (Lasker et al., 2001 in Turrini et al. 2010). While common expectations are limited and depend on the formats used to collaborate, positive perceptions will likely be present if the integration mechanisms allow members to cooperate smoothly through common means of collaboration that support joint operations in an effective way.

Size and composition

This variable therefore captures the perceptions of the influence on effectiveness by the number and composition of members in the network. While size has been found to be determinant for effectiveness, the effects seem to differ per network and depend on how well the coordination is handled as more members join the network. Drawing on the literature, the higher number of participants or after surpassing a certain size, the less effective a network becomes as governance of the network becomes increasingly difficult (Provan and Milward, 2001; Kenis and Provan, 2007). This means a high number of members does not have to mean cooperation is necessarily difficult, but it is more difficult to manage the collaboration (Kickert & Koppenjan, 1997).

Related to the number of members is the breadth of membership and degree of diversity in membership characteristics (Retrum et al., 2013). Breadth and diversity of members can increase effectiveness through more diverse contributions, but it can also increase potential barriers to building trust and forming dense connections needed for coming to shared agreements (Mitchell and Shortell, 2000; Retrum et al., 2013; Varda and Retrum, 2015). A network composition is thought to increase effectiveness if it reflects the goals and values of the network and adapts democratic principles of decision making accordingly (Retrum et al., 2013). Since members are likely to be organised differently, with different levels of authority and different intentions, this diversity can make it more difficult to work towards common goals. A different status of participants in the networks within their own organisations can also decrease effectiveness, as capacities of participants to commit resources and use their reputation to effectively contribute to collaborative initiatives differs among members (Hasnain-Wynia et al., 2003). Based on these findings, the expectation is that a high number of participants with high diversity increases effectiveness due to the collaborative advantage of having more shared input, but decreases the effectiveness when it makes taking decisions and alignment of goals and intentions more difficult.

Formalisation and accountability

The formalization and accountability mechanisms refer to how the rules and governance of the network itself influence the effectiveness of network. More specifically, it relates to the effects of the form of governance, the agenda setting and decision-making procedures. Drawing on the literature review, for participant-governed networks to be effective, there likely has to be a high density of trust between members and equal opportunities for members to influence the agenda, the decision making and to voice concerns (Provan and Kenis, 2008). For bigger networks with a lower density, a more centralised form of governance will likely lead to higher effectiveness since this helps to reach consensus and provide necessary network-level competencies for coordinating a larger and more complex network effectively. Similarly, when network structures allow all members opportunities to set the agenda and voice concerns, they are more likely to perceive the network as effective and feel ownership over the network processes and outcomes (Vantaggiato et al., 2020). Furthermore, stronger forms of accountability and transparency in networks are likely to increase effectiveness as this can positively influence commitment of members internally and increase support from the external surrounding as network activities can easily be communicated externally (Turrini et al., 2010).

Based on the literature review, the form of governance that is adopted will also have consequences for the way different tensions in the effectiveness of the network will play out. These tensions as seen in the literature review include efficiency versus inclusiveness, internal versus external legitimacy, and flexibility versus stability (Provan and Kenis, 2008). The variable of formalisation and accountability thus refers to how participants of the network perceive the influence of how formalisation and accountability in the network is structured. This influence is expected to specifically depend on the form of governance, the agenda setting and decision-making procedures. However, more positive perception of effectiveness is likely to be associated with equal access to the agenda and equal voice in decision making either way.

Network inner stability

The network inner stability refers to the stability of the participants in the network and their shared social capital in terms of trust and strength of connections in the network. Inner stability helps to maintain internal and external legitimacy, develop long-term relationships and develop common experience and know-how to maximize the effectiveness of a network. It is expected that network participants will feel that their network is more effective if the network is perceived as internally stable, with collaboration among familiar participants and managers

whom they trust and share strong interpersonal and interorganisational links with (Turrini et al., 2010; Juenke, 2005). It is expected that this improves knowledge sharing and innovation through lower perceptions of risk, as the network participants form an increasingly stable network with each interaction that reinforces and reciprocates their trust.

In contrast, a high level of competitiveness or conflict among those participating and managing the network is expected to worsen network stability and form a barrier to network effectiveness (Conrad et al., 2003). This can be a result from power differences that result in mistrust and hampering of a trust building process (Vangen and Huxham, 2003). Inner stability is also expected to conflict when there is need for flexibility in the network, as more stable ties within the network might make it more difficult to adapt the structure when needed (Provan and Kenis, 2008).

3.3 Network leadership behaviours

Network leadership is defined as *'the behaviours of public managers that facilitate productive interaction and move the participants in the network toward effective resolution of a problem'* (McGuire and Silvia, 2009, p. 35). While a distinction between management and leadership behaviours is often made (ibid.), this definition includes the leadership behaviours that can be practiced by all public managers throughout the network. The focus is thereby not only on the formal management or leadership, but rather on various participants of the network whose actions together determine network effectiveness by practicing leadership behaviours at various times in various roles (McGuire, 2002). The reason for looking at leadership behaviours instead of more general network processes, is because this helps to zoom in on how such processes can be steered to become more effective. The variables that are used for network leadership behaviours are activation, framing, mobilising and synthesising (Agranoff and McGuire, 2001). This is done because this classification has emerged out of limited literature on network managerial work as the most important leadership behaviours that can positively influence network effectiveness (Turrini et al., 2010). In contrast to the variables on structure, the variables on leadership behaviour are expected to all have a positive relation on effectiveness. A negative influence is expected in case of absence or limited presence of the described behaviours. While there is limited insight into exactly how these behaviours could be practiced, the behaviours are further described in more detail with expectations as much as possible.

Activation

Activation refers to a set of behaviours employed for identifying and incorporating network participants that positively influence network effectiveness, for example due to having the right skills, legal authority, knowledge, and resources (Agranoff and McGuire, 2001; McGuire, 2002). The variable of activation thereby focusses on how managers in the network go about finding the people with the right knowledge and resources for projects in the network and activate them to join in network activities. Equally important for effectiveness could be deactivation of efforts if the network perceived as ineffective. As found in previous research, activation can increase effectiveness by helping to cope with the unity-diversity tension. This is done through capacitating, which includes developing member and network capacity through training and incorporating quality members (Saz-Carranza and Ospina, 2010). The variable of activation is, if practiced, expected to positively influence network effectiveness through incorporating necessary actors and by making the network's organizational members more capable.

Framing

The act of framing refers to behaviours that influences the structure in such a way that it facilitates more effective interaction among network member organisations and participants of the network (Agranoff and McGuire, 2001; McGuire 2002). More specifically, this includes influencing the operating rules, network processes, the prevailing values and norms, and the perceptions of the participants in the network in such a way that it improves effectiveness. Acts of framing are most necessary to counter elements of the network that are perceived to be ineffective, by introducing new modes of collaboration, new ideas and a new vision that can align or realign participants under shared collaborative action. When framing behaviour is practiced, it is expected to positively influence network effectiveness by setting and adapting the proper structures, processes, and rules of engagement to form the necessary social architecture that facilitates both unity and diversity (Saz-Carranza and Ospina, 2010).

Mobilising

Mobilising behaviours refer to developing commitment and support for network processes from network participants and external stakeholders (Agranoff and McGuire, 2001; McGuire, 2002). Practicing mobilising can be done by bringing together organisations and

coalitions and by forging an agreement on the role and scope of network operations. This is expected to improve effectiveness by helping to build commitment and support needed for collectively achieving goals in an effective way. This includes relational behaviours of motivating and inspiring others to commit their time and effort to common objectives in the network. Conversely, a lack of mobilising efforts is expected to negatively influence effectiveness as network activities might lack commitment and support. Based on findings by McGuire and Silvia (2009), it is expected that efforts of mobilising external support also positively influence network effectiveness.

Synthesising

The last leadership behaviour that is studied in relation to effectiveness is that of synthesising. It refers to behaviours and actions that positively influence effectiveness by strengthening relationships and interactions. This can be done by creating an environment that facilitates achieving goals and reducing complexity and uncertainty, by promoting information exchange and strengthening relations among participants (Agranoff and McGuire, 2001; McGuire, 2002). Drawing from the literature, synthesising behaviours are expected to increase effectiveness by building trust through managing risks, instability, and power imbalances (Huxham and Vangen, 2003). These behaviours could also improve effectiveness because they help to overcome blockages and conflicts, and foster relations among diverse members. Such behaviours are expected to be practiced by using the right communication, recognizing credit, dealing with conflicts and bridging differences between members (Hasnain-Wynia et al., 2003; McGuire and Silvia, 2009; Saz-Carranza and Ospina, 2010).

3.4 Final framework

The different variables that are considered help to form a theoretical framework as seen in figure 2. The expected relationship is that both the structural and leadership behavioural dimension of networks determine network effectiveness at both the member and network level. While there are limited insights on the relation between both dimensions, it is hinted in the literature that they are mutually dependent and interrelated. The dotted arrow represents the expectation that structure will influence how leadership behaviours can determine effectiveness and the leadership behaviours in turn will influence the effectiveness of the structure. The expected relations are summarised in tables 1 and 2 instead of incorporated in the model, as some variables could be both positive and negative depending on the context.

Figure 2: Relationship variables network structure (adapted from Turrini et al., 2010) & leadership behaviours (adapted from Agranoff and McGuire, 2001) as determinants for perceived network effectiveness.

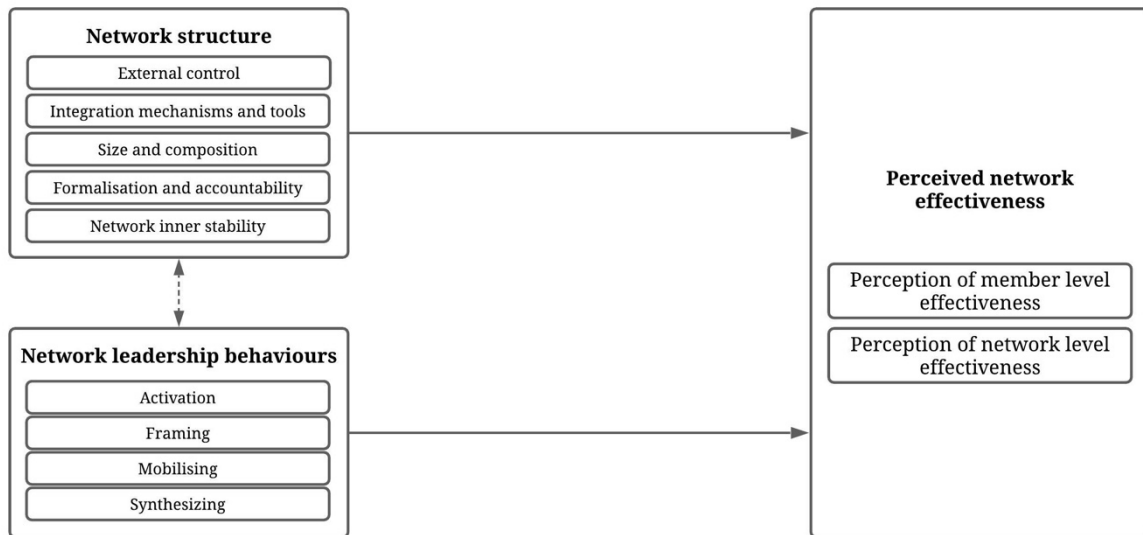


Table 1: Expected relation between structure and network effectiveness

Variables structure	Expected relation to perceived effectiveness
External control	Relation depends on perception of what is desirable in specific network context. Positive influence of external funding when it is direct instead of disperse
Integration mechanism and tools	Positive influence if the integration mechanisms allow members to cooperate smoothly through common means of collaboration that support joint operations in an effective way.
Size and composition	High number of participants with high diversity in membership characteristics is expected to have a positive relation through diverse input of knowledge and resources, but negative as density of connections is likely lower and taking decisions, alignment of goals and intentions becomes more difficult.
Formalization and accountability	Relation dependent on form of governance (shared – central) in relation to network tensions, agenda setting and decision-making procedures. Positive relation likely to be associated with equal access to the agenda and equal voice in decision making.
Network inner stability	When considered stable with high trust and strong connections, positive influence is expected through easier knowledge sharing and innovation, but negatively when flexibility is needed to remain effective. When considered instable, negative influence is expected through competitiveness and conflict that inhibits effective collaboration.

Table 2: Expected relation between leadership behaviours and network effectiveness

Variables leadership behaviour	Expected relation to perceived effectiveness (negative influence in case of absence)
Activation	Positive influence through incorporating necessary actors and by making the network's organizational members more capable to be effective.
Framing	Positive influence through setting and adapting the proper structures, processes and rules of engagement that facilitate effectiveness.
Mobilising	Positive influence through mobilising commitment and support, practiced through motivating and inspiring others internally and externally to commit time and resources to common objectives in the network.
Synthesising	Positive influence by building trust, overcoming blockages and conflict, and nurturing stability, practiced through bridging, using right communication, recognizing credit and dealing with conflict.

4 Research design and data collection

This chapter explains and reflects on the research approach, the case selection, data collection and data analysis. In doing so, implications of the research design and data collections for the findings are discussed in terms of validity and reliability. Lastly, the operationalisation is presented to give an overview of how the different theoretical concepts are used as variables that are addressed during the interviews, for which the topic list is included in the appendix to aid the reliability and replicability.

4.1 Research approach

This research performs a qualitative case study that mostly follows a deductive research design. For the goal of understanding the effects of internal processes and the perceptions of actors in a real-life setting, a case study provides a suitable approach as it provides the opportunity for analysis within a case (Toshkov, 2016, p. 285). Specifically, it allows for better understanding of the specific dynamics and collaborative processes that take place in the type of network and transnational setting. The depth of the context specific analysis benefits the internal validity, while compromising on the external validity. This makes generalisation of findings to other cases limited. (van Thiel, 2014, p. 87).

As established in the introduction and through review of the literature, there have been limited studies performed on internal structures and network effectiveness in the transnational and EU setting. While some findings might be case-specific, they can help to develop insight that is relevant for the broader research domain of transnational networks, as well as at a more general level of theory of determinants of network effectiveness. Discussing the context and specifics of the case serves as a way to ensure this process of generalizability as much as possible, by explaining the contingency of factors that were at play that may have contributed to the specific results of the research. This thick description (Bryman, 2016, p. 384 & 394) of the context can improve transferability of findings, by helping to make judgements on how the findings might apply to other cases that share some traits that are contingent to specific findings. In doing so, the qualitative empirical information gathered in this unique case study, aims to further develop and adjust current analytical and theoretical approaches to network effectiveness.

4.2 Case selection

The selected case for the empirical analysis is that of the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL). This case was selected to further our understanding of governance networks in a transnational context, specifically that of the European Union. As established in the introduction, the European Union showcases particular adoption of governance networks to deal with increasingly transnational wicked problems. This is specifically the case in relation to the EU's regulatory capacity in which most integration has taken place (Eberlein & Grande, 2005). The need for regulation that is uniform across member states is to a large degree a result of the integration of the internal market. However, the impact EU regulation can have cannot be overstated, also in the more current pressing issues that are on the political agenda. On a global scale there is an emergence of regulatory problems and challenges to climate change that demand a degree of international regulatory coordination that does not yet exist (Yasuda, 2016). At the same time there are cases where effective coordination proves its worth, for instance in the case of the EU regulation on banning inefficient vacuum cleaners that resulted in a CO₂ reduction of over 6 million tonnes (European Commission, n.d.). Such regulatory questions are quickly becoming wicked problems that have a high degree of uncertainty and complexity and that have parameters that are constantly changing (Yasuda, 2016). The need for effectiveness in regulatory governance within an international setting is thus paramount.

At the same time a large part of the regulatory activities and power remain at the national level. This creates a supranational regulatory gap (Eberlein & Grande, 2005) that is filled by the informal governance that takes place in between the supranational EU institutions and the national administrations, the European administrative space (EAS). This is the 'area in which increasingly integrated administrations jointly exercise powers delegated to the EU in a system of shared sovereignty' (Hofmann, 2008). This multi-level governance is taking place under more formal rules that have been fluid and developing over time as the *aquis communautaire* expanded, as well as in less formalized structures. The cooperation within this space is not limited to simply the transposition of EU law to the national level, but as Hofmann (2008) puts it, covers the entirety of cooperation amongst member states' administrations and the European institutions and bodies in various policy phases. Since an important part of the integration of governance practices across the EU will therefore not be found in Brussels but within governance networks, it is of value to see how these governance networks can encourage, accommodate, or inhibit more integration and harmonization of regulation across the EU. By researching the internal processes within these networks, it could improve understanding of

what makes transnational cooperation in networks difficult, but also how it can determine effectiveness. The insights from the selected case could in turn provide impetus for organising effectiveness in governance structures that enables convergence in transnational settings like the EU, through mutual understanding and creation of common practices that could prove beneficial for dealing with other transnational wicked problems.

Cases that have been researched are mostly networks of national regulatory agencies, under various labels like European regulatory networks, transnational regulatory networks, transnational administrative networks, transgovernmental networks and European administrative networks. These labels refer to same thing according to the meta-analysis of Mastebroek & Martinsen (2018), namely '*networks that consist of institutional representatives of national executives – primarily departments and/or agencies – with tasks in the realm of national implementation and enforcement of EU policies*'. While the labels might refer to a similar entity, these networks are nowhere near being organized exactly the same. They may be more vertically organized, with a distinct role by the Commission or an EU agency, forming agencified networks or networked agencies (Levi-Faur, 2011). They can also be more informal and could be horizontal and loosely bound, and the goals and roles in relation to international regulation differs from network to network.

The case of IMPEL was selected as it fits the criteria of an EU transnational network in the area of environmental issues, based on interest of the researcher and because similar research had dealt with other types of EU networks. Three different networks that relate to environment and energy were contacted through people active in each network that shared the nationality of the researcher, to which the National Coordinator of IMPEL replied positively. As mentioned in the introduction, IMPEL is an international non-profit association of the environmental authorities of the European Union Member States, acceding and candidate countries of the EU, EEA and EFTA countries and potential candidates to join the European Community (IMPEL, n.d.). The network is characterised by a collaboration between relatively homogenous actors from different public environmental authorities from various levels of government, that collaborate in an informal network of practitioners. As described in a shared document (IMPEL, 2013), the European Commission and the European Parliament give high priority to the implementation and enforcement of European Environmental Law and IMPEL's core objectives are closely related to these themes. IMPEL's stated aim is to create the necessary impetus in the EU in order to ensure more effective implementation and enforcement of environmental legislation. The focus of IMPEL is thereby on better enforcement of EU environmental legislation for practitioners that work in the field, predominantly inspectors.

IMPEL is an informal network where environmental practitioners from environmental authorities can participate in shared projects and activities that can help to deal with challenges in their daily work. Members typically are Environmental Protection Agencies, inspectorates, permitting agencies and Ministries, as well as associations of such organisations that work on the implementation and enforcement of environmental legislation. The network consists of 55 environmental authorities from 36 countries. The network derives its income from the European Union and from an annual membership fee of €5,000 per member organization. Since it is a voluntary network, the network's projects rely on the participation of its members in their shared work, decision making, projects and activities.

These projects are coordinated within five expert teams that cover the thematic teams that IMPEL deals with: Industry regulation, Waste and TFS (trans-frontier shipment), Water and Land, Nature Protection and Cross-cutting tools and approaches. Through projects and networking activities such as informal and formal meetings including conferences, practitioners can collaborate to address key implementation gaps of environmental legislation. The structure includes a board that is responsible for day-to-day management and is comprised of personnel from the network's membership and includes those who also serve as expert team leaders. The network is supported by a common secretariat supervised by the board, which forms the backbone of the network. The highest authority of the association is the General Assembly in which decisions are made on the budget, working programs, project proposals and project reports. The number of members in the network per country differs, whereby each country designates a single National Coordinator that represents the members from a country in the General Assembly. The General Assembly can also admit observers and experts to the association who can be consulted. While benefits can be perceived different from member to member as is addressed in relation to effectiveness in this thesis, the formal website mentions key benefits of the network to be *'networking, joint learning, sharing of best practices, access to shared communication platform, increased capacity, help for using limited resources more effectively, collaboration between enforcement authorities, peer reviews and engagement with external partners and networks within the field of environmental regulation'*.

4.3 Data collection and Analysis

The data collected for the analysis includes 14 semi-structured interviews of 40 minutes on average with 14 participants in the IMPEL network. The unit of study is derived from the research question, namely the perception of different participants of the network that is being studied. Access to the respondents was provided after initial contact with a National

Coordinator. A first conversation was held to familiarize with the case and to relate the research aims to the current topics of interest present in the network. At the time of the research, the network was going through a review of its governance, which likely explains the cooperation of participants, since similar questions central to the research were also being considered within the network. The National Coordinator functioned as key person that assisted in selection of suitable respondents (van Thiel, 2014, p. 97). On the basis of this person's experience and position in the network, a list of possible respondents was provided that were expected to be willing and competent to provide good insights, but also that were expected to provide diverse opinions on the research question. Within these criteria, the group of respondents was purposively sampled for maximum variation where this was deemed useful for broadening the scope of perspectives included in the research (Bryman, 2016, p. 409). The provided list of contacts included countries and members that varied in size and culture, improving the reliability and validity of the data. A mix of perspectives was further ensured through the variance in amount of experience and positions in the network of respondents.

The units of study were participants from different member organisations in 11 countries that held a central role in the network, either as National Coordinator or as experienced member within the network. The reason for selecting more senior people in the network is that they have more experiences to reflect on through their central role in the network and are also more concerned with the research topic. There are many participants that only frequently take part in network activities, but to answer in detail on the effects of the structure and leadership behaviour it was deemed best to select participants that hold a central role in the network. A consequence of selecting participants in this way is that the perspective of participants who only frequently participate is less prevalent in the findings, which would likely include more moderate opinions about the research topic. The perceptions of the participants in this research are their own personal reflections on the effectiveness of the network to themselves, the member organisation they are from and the network as whole. This reflects the research aim to analyse perceptions of network participants as unit of study, rather than coming to conclusions for perceptions of the whole network or all members.

While the selection by the person granting access to the network is expected to greatly improve the findings for all the above reasons, there will be perspectives excluded of people who are less familiar to this person. Out of the list of 23 people that was provided, 14 people were interviewed one on one via video call at a single point in time. While some people that were not interviewed expressed willingness to contribute, there were also some who did not reply. Judging on the conversations that were held, the main reason is likely time constraint at

the end of the respondents. Many participants have no dedicated time for participation in the network and hold a fulltime job in their own organisation, so contributing to external research could be cumbersome. Reasons are likely also that some were more comfortable with speaking in English, and some were more concerned with the research topic, as some declined on the basis of the feeling of having too little experience to effectively contribute. While not everyone was interviewed, there was empirical saturation with 14 respondents (Bryman, 2016, p. 412), since they had similar experiences given that they were selected from the same network. Their reflections shared many commonalities, which also allowed asking about issues that came up in previous interviews. This further strengthened the credibility of findings (Bryman, 2016, p. 384), since findings were confirmed across respondents.

The interviews were semi structured using a topic list through which both inductive and deductive approaches were taken. This was done because the respondents' perspective is central to the research and this allowed flexibility during interviews to further expand on the interviewee's point of view (Bryman, 2016, p. 466-467). Each interview started with an introduction by the researcher and some non-sensitive questions about the value of participating in the network and how they engage with the network. The topic list (see appendix) consisted of questions based on the operationalized variables from the theoretical framework, to specify which information was being demanded. The order of topics depended on the flow of the conversation and was altered during the time of interviews to improve the flow of the next interviews. Furthermore, respondents were asked to come with examples and supplementary questions were asked to fully understand respondents' perceptions, as well as to specifically ask about issues that came up in previous interviews. Each interview included room for inductive findings to come up, both during the interview and explicitly at the end. These findings were either linked to the structural or the leadership behavioural dimension in the findings as inductive findings or discussed at the first sub question of general perception of effectiveness.

Out of the 14 interviews, 10 were conducted in English and 4 were conducted in the native language of the researcher if this was shared with the respondent. Any quotes used as findings have been translated to English, keeping the translation as direct as possible. While the topic lists were the same regardless of language, there is likely some variance in the freedom of speech depending on respondents' command of English or whether it was conducted in people's native language. Given the international nature of the researched case, there could also be an influence on the interpretation of questions and findings due to cultural differences. While this was taken into account as much as possible in the interviews and reflected on in the analysis,

this could have some impact on the reliability and validity of the findings. The interviews were recorded and transcribed, after which they were coded and analysed using the software Nvivo 12. The used codes directly reflected the considered variables, whereby new codes were made for analysing inductive findings. Respondents knew their contribution was anonymized to a degree that individual citations of transcripts could not be related to a specific individual and were given the opportunity to check direct quotes when used in presenting the findings. This did not result in any censorship, but rather allowed for some respondent validation (Bryman, 2016, p. 385) and helped to ensure reliability as it allowed people to speak more freely during the interviews. To further ensure ethical use of the data, each respondent was asked to sign a consent form or agree verbally to confirm their participation under these terms.

4.4 Operationalisation

The operationalisation of the variables found in table 3 serves as way of describing how the described variables of the theoretical framework guide the analysis. It broadly describes both for structure and leadership behaviours what is looked for in the empirical analysis. Following the words of Blumer (1954, p. 7) '*Whereas definitive concepts provide prescriptions of what to see, sensitizing concepts merely suggest directions along which to look.*'. The sensitising concepts from theory are used to guide the empirical analysis in the sense that they are used to see how these determinants of network effectiveness relate to the context of the specific case of IMPEL (Bryman, 2016, p. 383). In line with this thinking, the theoretical framework should not be seen as a conclusive approach to network effectiveness. There was explicit room for inductive findings to come up in relation to the effects of both dimensions outside the considered variables. The operationalisation thereby guides what was looked and asked for while conducting the qualitative interviews (see topic list as appendix).

The theory is used to examine how respondents perceive how the structure and leadership behaviour in their network determines the effectiveness of the network. The dimensions of structure and leadership behaviour form two groups of independent variables that influence or determine network effectiveness. The perceived effectiveness forms the dependent variable, in which a distinction is made between effectiveness to the respondent and/or their organisation, and the effectiveness of the network as a whole. This not done in an explicit fashion for each variable, but distinctions are simply mentioned in the analysis when respondents explicitly mention that certain influences are particularly effective for themselves or the network as whole. This is done because the respondents are all participants of the network, but also part of their own organisation. This means that their perception of effectiveness likely includes both

the levels of effectiveness to themselves and the level of effectiveness to their collaborative efforts as a whole.

Table 3: Operationalisation

Concept	Definition	Variables	Operationalised definition
Perceived effectiveness	Effectiveness of a network is as perception among members on how effective their network is at <u>achieving network goals</u> and <u>delivering benefits and opportunities to the members</u> in a smooth and productive way.	Network level effectiveness	Perception of participants on the effectiveness of their network and/or what they value or expect from the network as whole to be perceived as effective.
		Member level effectiveness	Perception of participants on the effectiveness of the network for themselves and/or what they value or expect from the network to be effective for themselves
Structural dimension	The structural dimension is defined as the characteristics of how a network is structured that can have a determining effect on network effectiveness. These include characteristics of <u>external control</u> , <u>integration mechanism and tools</u> , <u>size and composition</u> , <u>formalization and accountability</u> and <u>network inner stability</u> .	External control	The way external control is structured in the network and influences members' perception of effectiveness, specific focus on effects of influence by the EU and governments, through funding and/or agenda setting.
		Integration mechanism and tools	Perception of how effective one can engage with the network. Perception on the effectiveness of the means of collaboration such as a working in subgroups, central coordination, joint information and communication systems, and division of funding
		Size and composition	Influence of size and composition in terms of amount and diversity of members, whereby diversity places focus on the perceived effects of the diversity or similarity of members
		Formalization and accountability	Influence of formalisation and accountability, in terms of the form of governance, agenda setting and decision making procedures
		Network inner stability	Influence of inner stability in terms of trust and strength of connections among members on perceived effectiveness
		Inductively found	Quotes on structure related to influences outside the scope of the variables considered upfront

		influences of structure	
Behavioural dimension	The behavioural dimension consists of the leadership behaviours of <u>activation</u> , <u>framing</u> , <u>mobilising</u> and <u>synthesising</u> , that intervene within the network structure and have an influence in determining the effectiveness of a network	Activation	Influence of activation behaviour on perceived effectiveness. Includes what behaviours are effective or ineffective in identifying and incorporating activating network participants with the right skills, legal authority, knowledge and resources;
		Framing	Influence of framing behaviour on perceived effectiveness, by changing the operating rules, prevailing values and norms and perceptions; covers quotes on actions and behaviours that increased effectiveness by leveraging and adapting structural aspects in the network
		Mobilising	Influence of mobilising behaviour on perceived effectiveness, by mobilising commitment and support inside and outside the network; covers quotes on actions and behaviours that were deemed important for mobilising support for the network internally and externally
		Synthesising	Influence of synthesising behaviour on perceived effectiveness, covers quotes on building trust, overcoming blockages and conflicts, nurturing stability, and dealing with differences between members
		Inductively found influences of leadership behaviour	Quotes on leadership behaviours that influence effectiveness outside the scope of the variables considered upfront

5 Analysis and discussion of findings

The findings are presented and analysed to answer the main question concerning perceived network effectiveness. First, an overall perception of effectiveness is discussed to show what participants perceive as effective in their network, what they especially value and what they expect from a network that is effective. This forms a descriptive insight on what the aims and goals in a type of network like IMPEL are, in relation to which perceptions of effectiveness are formed. Secondly, the effects of structure and leadership behaviour are discussed. These findings should be understood in the light of the interactively defined notions of what participants potentially want from their network in terms of goals and benefits mentioned in the overall perception. The findings are analysed and discussed in relation to the existing literature about each separate variable. The goal is to see what determines effectiveness in IMPEL specifically, and to see how findings correspond or differ from that of previous research. The findings directly related to the theoretical framework variables are complemented by inductive findings that came up and were deemed important when assessing perceived effectiveness in networks

5.1 Overall perceived effectiveness

All respondents underline that, overall, they greatly value IMPEL as a network that is beneficial to their everyday work and leads to more effective implementation of European environmental legislation. IMPEL is a voluntary network, meaning the perception that the network is effective for its members is to some extent already reflected by members taking part and investing in the network in the first place (R9, R11). The value of the network to members is derived from it being a European network at the practitioner's level. Some respondents explain that it is the uniqueness of IMPEL being a network of practitioners for practitioners, that makes it effective for them to participate in and value the network (R1, R2, R4, R7, R12).

R12: "We think it is very important to preserve the uniqueness of IMPEL by maintaining this practitioner's network and the possibility for practitioners to directly interact with each other because otherwise IMPEL would very easily fall into a big box with other similar networks."

These respondents underline that IMPEL is mainly a bottom-up network in which practitioners have ideas they want to carry out together or face challenges in their own organisation they believe can be better addressed through collaboration with similar organisations across Europe.

The main value mentioned by most respondents is the opportunity to learn from each other by exchanging knowledge and best practices (R1-4, R6-8, R10-14). Respondents state that they have gained a lot of knowledge about the implementation of European law and the challenges they face in their daily work. The network provides the opportunity to create important connections with other European colleagues that face similar administrative and implementation issues.

R6: "I've always considered IMPEL very helpful for my day-to-day job, for me to understand better what I do why I do it like this, could there be other ways of doing it, how do others manage the same questions and can we use some of that knowledge?"

Similarly, respondents (R6, R13, R14) mention the value of collaborating through IMPEL with other transnational networks that are part of the compliance chain in environmental legislation, such as the judges and prosecutor networks. The exchange between practitioners in inspectorates of environmental legislation across Europe, serves the purpose of dealing with the implementation challenge of shared directives. A respondent explained this as follows:

R1: "My experience of the European discussions in Brussels show that it was difficult to agree on common principles as there is a vast diversity of habits, administrative structures. Once you have achieved a common text on a directive, there are plenty of things that you have to fine tune... the details depend on your administrative structure ... and you cannot converge on everything in the text of the directive. There is a challenge of implementation. And this question of implementation is not easy to deal with."

Learning and knowing from each other how practitioners deal with implementing European environmental directives helps to understand what the environmental risks are, where most breaches in compliance are, how they should be mitigated, how regulation can be interpreted and at what level authority can best be exercised (R14). Although differences between members are certainly there as is discussed under 'size and composition', all respondents state that the process of learning is going in both directions. All countries have some areas in which they feel they are more advanced, able and willing to share knowledge on, and some areas in which they feel they can really learn from other countries. The collaborative advantage of this knowledge exchange yields quicker and higher standard solutions, using less resources (R1, R6, R7). For example:

R 13: "We were interested in thinking about using drones for the inspectorate and we were very happy that colleagues in another country had experience in that and told us yes, it can be useful, but we had difficulties with using the images regarding individual freedom. The discussion we then had was useful, because when we had a law in which we put the use of

drones all these questions were asked by our parliament, so it was a good experience to have this background.”

Next to networking and learning, the value and perception of effectiveness for respondents stems from the opportunity to have influence over legislation in other countries. They state that environmental issues are mostly the same among member states and do not stop at country borders, which is why knowing what others are doing is particularly valuable (R1, R10). This is in line with the increasing need for network governance in the literature to deal with transnational issues and interwoven wicked problems (O’toole, 1997; Yasuda, 2016). The most important part of the network to some is to be able to level how environmental aspects are regulated throughout Europe, so that a level playing field is ensured in which industry and other actors are treated everywhere the same (R9, R10, 14). Apart from the concerns about the environmental protection and nature conservation, members have an interest in ensuring harmonisation of legislation to level economic ties between countries in Europe. The added value of doing so specifically through IMPEL is described as follows:

R10: “An important reason to contribute to the network is that as a country you have little influence on regulation, only via the European Parliament. Informally through the network you are able to do much more and send more powerful signals, since all the experts are there, and the European Commission also consults the network when reshaping directives.”

The value is therefore found in influence at the practitioners’ level, since projects and guidelines developed within the network are sometimes taken over by the European Commission as the standard for implementation. Having influence in the formation for these standards is mostly seen as beneficial for the members of the network. Respondents state IMPEL is a well-known network and that the European Commission values IMPEL, because their policies ultimately depend on the execution and capacity of the practitioners tasked with implementing them. The value of IMPEL to its members is therefore that it forms a back door to influence European regulation, as it can help to exert influences that were not possible during formal negotiation on policies. This is possible because IMPEL is not a network of national representatives, but a known and recognized network of practitioners. This allows for informal exchange with the European Commission at an expert level, that would not have possible in the negotiation phase. On other hand, it was also mentioned that when the line between being a network for learning amongst practitioners and dealing with policy becomes blurred, the

freedom of participating is compromised as participants do not formally represent their government (R12).

The overall perceived effectiveness shows around which goals perceptions of effectiveness on participating in IMPEL are formed. Although there are differences between participants as will be discussed when talking about structure and leadership behaviour, effectiveness in a general sense is derived from the opportunities of learning, exchanging knowledge, and exerting influence on the policy process at the practitioner's level. These findings help to understand in relation to which goals the influence of structure and leadership behaviour are perceived.

5.2 Structural dimension

External control

The importance to members of staying independent and the positive influence this has on the effectiveness of IMPEL was frequently mentioned (R1, R4 R5, R12, R14). The literature on the effect of external control on effectiveness is limited since it is dependent on the type of network. For IMPEL, as a voluntary expert network, independence is seen as effective because participants are more likely to share information if they believe that they are talking from inspectorate to inspectorate. Influencing how inspections are done or what they are based on could be interesting to lobbyists, but their participation would negatively influence effectiveness as it drives IMPEL activities towards policy. This could be problematic since members do not have the authority to engage in this way (R12). More specifically, independence from for instance consultants or lobbyists also improves the relationship of participants amongst each other (R1).

As established in the previous paragraph, countries sometimes try to influence the workings of European legislation along the line of the practitioners. For example, when certain regulations might be watered down during the discussion in Brussels, countries try to push for a project within IMPEL (R9). These findings point into a similar direction of what O'toole and Meier (2004) found that networks are used as means of policy diversion since they are less formal and accountable structures. Based on the perception of participants however, the external influence of individual countries was not necessarily seen as negative to the effectiveness. Projects are carried out by multiple members either way, and some issues are simply more

important for some countries. This does have an influence on the agenda setting, which is further discussed under ‘formalization and accountability’.

There is also an obvious external connection with the European Commission that plays a role in the effectiveness of the network. Most respondents do not really find there to be an influence in terms of external control by the Commission on the network and feel they are given total freedom. They do state there is an obvious and mostly beneficial relationship in which they need to work together. IMPEL is well known by the Commission and many changes of regulation are coming from IMPEL reports and recommendations (R3). There can be strong discussions on this between the network and Commission, but the priorities often overlap since both are working towards the same aim (R5, R76, R13). For the Commission on the other hand, IMPEL gets them close to the implementation on the ground (R6) as it lets them bypass the political filtering of governments (R5). For the relationship to be effective however, the work of IMPEL and the Commission need to be continuously streamlined to avoid conflicts or double work (R1, R4, R11). The representatives of the Commission thereby also change over time, so there is a need for actively communicating what IMPEL does to the EC.

There are however different perceptions on the potential and experienced influence of the funding by Commission. Some respondents state that while the network has become mostly reliant on Commission funding, the network should make sure it continues to work based on what members want. They mention that this had made getting funding more complex (R3) and the EC should mostly be there to listen in and not influence what IMPEL does (R14). The reason given is that if members do not see the benefit, then IMPEL will likely not survive since members will look elsewhere (R1). There is also the potential issue raised that there is less freedom to discuss problems or breaches in implementation openly within the network if the Commission could hold this against member states (R12).

Others see the influence by the Commission through funding as something that is either part of the game or even positive for effectiveness. They state that IMPEL is a European network for applying European legislation, and the Commission also pays so a role for the Commission is deemed fair. Moreover, through the funding a more strategic view is introduced to the network, which benefits the network. The financing of the Commission therefore is positive for the effectiveness because you know that what you are working on is useful (R10, R13). This perspective is in line with the expectation from O’Toole and Meier (2004a), in the sense that direct funding leads to more effectiveness. The reason for this is that the direct

funding is based on aligning with the Commission, thus increasing the chance that funds are used more effectively than when projects are based on members' needs only.

R10: "I think they should have influence, otherwise the added value for the Commission will be lost, so let's not do that. They supply the regulation, so I think it's the way it should be. I think we should actually listen more to the European Commission, even though we don't like that sometimes."

Taken together, the divergent opinions about the external control through Commission funding lay bare a significant tension also shown in the quote above. When the Commission as funder steers the network through expressing the desire for IMPEL to work on certain projects, but members feel this is not what benefits them directly this could form an issue (R2). This tension between staying an independent voluntary network on the one hand, and professionalizing and developing professionally on the other, reflects the possible tension between member level effectiveness and network level effectiveness.

Integration mechanisms and tools

The network's main forms of engagement are the expert teams in which members participate in projects, that splits the network into subgroups under central coordination of the board and expert team leaders. Although this is not the most notable or striking finding, the overall positive perception of the general structure of the network forms a major part of the effectiveness of the network. This is in line with the expectations that these form the vehicles for synergies and binding different inputs and perspectives (Lasker et al., 2001).

Two specific means of collaboration were frequently mentioned, the first being the formal communication system that is used. Respondents mentioned both positive and negative influences on the effectiveness of the network. The knowledge sharing platform used within IMPEL allows for a means with which people can easily ask questions about day-to-day issues in their work. This is found to be effective because all counties are receiving the messages making them all aware of issues others are having, which in turn can help in their daily work (R1, R2, R6, R11). The constant exchange is also said to help feel part of the broader organisation, supporting them so they are not alone.

R1: "I just came out of a conversation on the Basecamp knowledge sharing platform about a plastic waste shipment and all of a sudden there were about 40-50 people from across the network who were saying, ah, we're working on this and we have exactly the same

problems that you're encountering. So they just created this conference call to talk through the issues, exchange those ideas on what everybody is doing and from there they can kind of pick out some of the best approaches to tackle the problem.”

However, some also mention this form of common communication to be very problematic to the effectiveness of the network, due to an overflow of information and communication (R11, R12). This results in participants pushing aside the communication and important information thereby gets lost or becomes difficult to retrieve.

The second means of collaboration that was frequently mentioned to play an important role in the effectiveness is the IMPEL review Initiative (IRI). This is regarded as an important peer review tool (R5, R7, R11, R12) whereby different members of IMPEL review the situation of one organisation, which is seen as a valuable opportunity for confrontation with member organisations and for keeping the network together (R5, R7). A major part of the effectiveness of the network namely comes down to how tools and lessons from the network are translated to the member organisation (R5, R6).

R5: “We can speak about the production of guidelines, the production of tools, the vision of what you want as a network, but you never have the actual sensation of what happens inside the receiving organization. As a delegate in IMPEL I go home, I deliver my new guidelines to my manager, and he says okay thank you so much and often puts it in a wastepaper bin, because the supplied product frequently does not fit with the perceived priorities of my manager. But if you are there, you can actually see the dynamics that are inside there and ... in some countries it is the only opportunity to create a contact between IMPEL and the top management of an organization.”

The IRI as collaborative tool provides the opportunity to give direct advise to the actual member organisation. How the lessons are translated to the member organisation is mostly dependent on the actual participant in the network of the individual organisation, as is also discussed under leadership behaviours. The IRI allows for the network to not only engage with the participants of members, but also the high-level management of each organisation. This in turn can help to land the output of the network in the actual organisations. The expectation from the literature is that the means of collaboration can support the effectiveness of joint operations by serving as integration mechanisms. Although respondents value different projects and joint operations, it was the transfer of the output of projects to the member organisation or other professionals in home countries that determined the effectiveness the most. The peer review through IRI forms one of the few ways in which participants of the network engage with the broader member organisations instead of single participants. This helps the network integrate past the level of participants with the high-level management of the member organisations.

Size and composition

The size and composition concern the effects of the membership in terms of the breadth and diversity of the membership on effectiveness. First of all, respondents mention that they gain a lot from the diversity of the different entities in IMPEL. Both the diversity in terms of the areas of environmental issues covered in the network, as well as the different backgrounds and expertise of members, have a positive influence on the effectiveness. Respondents explain that the tools and insights gained in one environmental area or national context, can provide a wider variety of tools and solutions that are potentially valuable to use in other contexts (R13). Positive influences are also mentioned in relation to learning from each other's stage in environmental legislation. Newer EU member states thereby see potential in learning from members in countries that are 'ahead' in environmental legislation (R8), and older EU members see potential in learning from acceding countries that made enormous progress in a short amount of time (R9). This shows, in line with the expectations from the literature, that the diversity and breadth of the projects in the network improve effectiveness through diversity in contributions, which provides many opportunities of learning through cross-fertilisation.

Despite benefits, the diversity between members also poses many challenges for the effectiveness of common projects and using the output of the network. While the diversity of national contexts and administrations of members allows an opportunity for learning, it also affects how effective members can engage with the network. Some countries have an older system of environmental protection or simply a differently organised public administration. This makes it more difficult for some members to turn directives into legislation because their system of environmental law differs more to European law than other countries. In some cases, national and European law are even in conflict with each other as described by a respondent:

R8: "We have problems that our national law is sometimes against the European law because they are not interested in European law because they are satisfied with our national law and they don't want to be part of international project ... it is not easy because also in the highest level they think that if more people want the old system that it is better."

This also has to do with the organisation of members themselves. Whereby some member organisations cover all areas of environmental legislation, others come from a country where the administration is much more fragmented. This creates big differences in terms of how easy members can participate and benefit effectively in the network. This also has to do with different positions participants have within their respective member organisation. There is a

difference in seniority between participants that creates an unbalance in how much people can say on behalf of their organisation. Most participants do not represent their national governments, which results in some people being able to say more than others and some needing to go back to speak to their government department when things move in the direction of policy (R1, 12). Similar to what Hasnain-Wynia et al., (2003) found, these different levels of authority and representation negatively influence effectiveness as it is more difficult to equally contribute and efficiently come to shared agreements.

The large breadth of membership with members from many different countries also makes it more difficult to ensure activities in the network remain valuable to all the members.

R5: "The bigger the network became, the bigger the problem of implementation of the results of the activity of the network became, because of that difference."

R2: "You see a big difference in professionalism between organisations. So you are in fact dealing with projects in further professionalization, but you also have projects that you can best describe as a kind of development aid."

Some state that they find the output of projects very effective, and they have implemented it into their daily work or notified their ministry or agency to improve on certain issues (R3, R11). Others state that they have not seen use for the projects in networks or found that participants from their organisation were assigned tasks such as translation that were not valuable to them. It shows a tension between striving for effectiveness for individual members or for capacity building for others that makes the network more effective as a whole. While the optimum size of the network in relation to effectiveness is difficult to judge, these findings do reflect the literature (Kickert & Koppenjan, 1997; Provan and Milward, 2001; Kenis and Provan, 2007), in the sense that it becomes increasingly difficult to manage shared activities as diversity among participants increases.

The difference in administrative structure of members also influences the perceived effectiveness by posing problems for voting within the network. From some countries there is only one member in the network and from other countries there are multiple. This means there are member organisations who represent one organisation, but other members are an umbrella organisation with many local inspectorates and constituencies underneath this. The problem some respondents experience is that every country has a single vote within the network, but their membership is organised very differently depending on their degree of centralisation. (R2, R9). That means that some feel they have very little influence because they must coordinate

their vote within a large group. At the other end, the equalized voting power among countries could also be seen as positive for the perceived effectiveness of non-EU members states, as it increases their influence relative to their position at the EU:

R14: “In the EU context we are not allowed to vote, but in IMPEL we are just a normal Member, no differences. it's a selling point for me towards other managers, ... by having our voice heard in IMPEL, we are able to influence the EU in that way as well.”

The breadth of membership in relation to influence in the networks can thus influence perceived network effectiveness at the member level in different ways. In terms of the effectiveness of the network as a whole, the diversity makes it more difficult to find a voting mechanism that caters to all the different members. Many organisations have little incentive to become an official member instead of operating under an umbrella organisation, because it does not change their influence in the network (R12). At the same time if all decentralised organisations would become members and would be able to vote, the network size would become infeasible (R6). Retrum et al. (2013) thereby state that the effectiveness can be improved if the decision making is adapted along democratic principles as the membership grows. The findings show a similar tension that perceived effectiveness is compromised when the decision-making structures do not match the growing size and composition.

Formalisation and accountability

Building on the effects of the match between the decision making and the size and composition, there are multiple implications for effectiveness in relation to how the network is governed. IMPEL is a participant-governed network, meaning that the participants together govern the network with a General Assembly as the highest decision-making body. The literature suggests that for this to be effective, there needs to be a high density of trust and equal opportunities to voice concerns and influence the agenda and decision making (Provan and Kenis, 2008; Vantaggiato et al., 2020). Overall, the respondents explain that they feel they are all equal in the network, that they can voice concerns if they want to and that decisions are made democratically (R1, R11, R13, R14). As discussed, the independence and feelings of being able to influence the network are important to many respondents.

At the same time the network is growing and finds itself in a transition phase where the governance is being adapted to professionalize further. The phase that the network finds itself in relation to their form of governance, shows many resemblances to the tensions described by Provan and Kenis (2008). For shared governance to remain effective multiple conditions are found to be necessary: strong connections among participants, equal contributions in time and effort, equal input in decisions, consensus about network goals, limited need for network-level competencies. As shown in all the findings discussed up to this point, the increased diversity and size make it increasingly difficult to find consensus within the network.

One of the tensions that affects the perceived effectiveness is related to the agenda setting and the distribution of efforts in the network. There seems to be an increasing tension for effectiveness between the bottom-up approach of shared governance versus a more central and strategic approach.

R14: “The thing that makes it efficient is that it's driven from the bottom up. The topics that we see that several participants are interested in doing is what is dealt with, that seems efficient to me, but then there's a smaller group of participants that are very eager driving the network and its voluntary participation. So it's kind of the loudest voices that are heard and the eager people and maybe the network sometimes probably misses something. There's probably a lot of very interesting projects that's not being done.”

Decisions on what is put on the agenda and which projects are carried out was mostly a bottom-up process. Respondents state that this is an effective way of doing so, because it is a voluntary network and the projects and agenda items should reflect the current problems members are dealing with. On the other hand, respondents mention that it can be very ad hoc and projects can easily miss any connection between them (R10). It is also mentioned that it is

sometimes unclear for whom the addressed issues are relevant, questioning whether projects serve the whole network or only a subset of members. This shows a growing tension between members' effectiveness of doing projects based on individual members, and network effectiveness through strategic and coherent choices in projects.

Similarly, there are tensions related to how much effort everyone puts in. As is discussed in the next section on the stability of the network, there are big differences in capacity of members and participants. While respondents say they can push for projects if they want to, they refrain from doing it because they lack the capacity to lead it (R14). To some members this variance in contribution creates a tension:

R2: "The tragedy of the network is that there are a number of countries that take up a lot of work and are also very committed to participate. And there are many countries that mainly consume. This is not because countries mainly want to, but because they often have no options to do so... I think it's very important when you look at the future of the network that everyone will do their fair share."

Similar to Provan and Kenis (2008), this shows that in shared governance there tends to be enthusiasm among members at first, but as the network grows with participants that have varying capacity, the division of labour becomes skewed. In this way the case resembles similar tensions that all can be related to being participant-governed while growing in size. As the network becomes larger and more formalised and professional, there is also the need for more network level competencies that need to come from members. With the development of IMPEL, there is more need for competencies in dealing with money, accountability, human resources and financial management (R11). This forms a tension because the network is led by participants themselves who are not necessarily experts in leading an increasingly complex network (R6).

While staying participant-governed is valued by most members, tensions arise as the network grows and demands more strategic and central forms of governance. In sum, the formalisation and accountability have a strong influence on effectiveness, in terms of how the form of governance functions in relation to how the network is evolving. These findings underline the findings on tensions described by Provan and Kenis (2008) that arise from network evolution and the form of governance.

Network inner stability

Many of the tensions addressed under the section on formalisation and accountability ultimately influence the effectiveness by how it effects the stability of the network. Overall, there is a high density in terms of trust amongst participants that is considered to have a positive influence on effectiveness. Many even refer to ‘the IMPEL family’ (R1, R6, R10, R13), referring to a dynamic in which everyone is willing to help everybody else out. As explained in the section on overall perceived effectiveness, it is the strength of connections and the informal exchanges that form a major part of the perceived effectiveness by participants in the network:

R1: “It's the opportunity to be able to pick up the phone to people that you've worked with through IMPEL and it might not even necessarily be in the context of the network, but through those relationships that you've built through being part of the network.”

R7: “The most valuable moments during meetings are the breaks or dinners, when you sit next to someone and ask, how do you deal with this? This is when you learn the most and retrieve valuable information.”

At the same time there are multiple factors that pose a threat to the stability of the network, and as such to the effectiveness of the network. As mentioned, these factors can for the most part be traced back to the tension between the growing membership and the voluntary and participant-based form of governance. The inner stability is threatened in terms of structure by the constraints that the voluntary nature of the network poses. With the large breadth of membership, there are considerable differences in capacity of participants to contribute to the network. Participation ultimately depends on the time available and granted by the member organisation that differ in size and capacity. The value of the network is sometimes also perceived differently by people in the member organisations than by the person from the member organisation that participates in the network. Likewise, some members simply do not have the resources to give dedicated time to their personnel to be active in IMPEL. While some participants are happy about the fact that they can participate without spending much time, it also makes it difficult to professionalise further and continue to engage in shared activities.

R10: “The contribution of project members is often done in people's own time. This is also the pitfall of the entire network because that means that if you have ten project members and they are all involved in this way, then you cannot produce anything ... that makes it difficult to have dedicated time for the various projects, for the staffing of expert teams and therefore also for the board.”

The growth and professionalization while staying a voluntary network also creates what all participants have referred to as a leadership crisis (R1-14). The network is led by the board,

which is formed by participants from the membership, whereby these leadership positions are regarded as a full-time voluntary job. There is therefore a lack of willingness to put forward people for leadership positions because member organisations would need to lend skilled people for a full-time job to be leader in the network. Active members with skill and capacity have a history of supplying the leadership and now do not want to do it anymore and the smaller countries with less capacity feel they cannot supply the leadership. This also has to do with the skills of participants as respondents mention some participants do not step forward because they are not familiar with international networks or have limited command of the English language.

The leadership of the board and chair is seen as crucial and needs to be professionalised further, but the crisis of leadership creates instability because of the lack of willingness to take on leadership positions. Together with the limited time participants receive from their member organisation to participate, it forms the most frequently mentioned negative influence on the effectiveness of the network. These findings show similar effects as described by Turrini et al. (2010) and Vangen and Huxham (2003). The feeling of trust and close connection is seen as beneficial to the effectiveness of working together and learning from each other. At the same time the developments in the network that have made the network perceived as less stable, are perceived to negatively influence the effectiveness. While most respondents understand everyone has a different capacity to contribute, it is these differences that negatively influence the collaboration and trust building process.

5.3 Leadership behaviour dimension

When asked about leadership in the network, most respondents discussed the formal leadership formed by the board, including its chair and possible co-chair. The board is formed by participants from the members of IMPEL, given their participant mode of governance. It is also recognised that the leadership in terms of strategic thinking within the network is performed by multiple 'leaders' including, the board, experienced members and expert team leaders (R13, R14). The focus however is on key leadership behaviours practiced throughout the network that were found to be critical for effectiveness. Within this focus, there were multiple interrelated behaviours that performed an essential role in increasing the effectiveness of the network. These leadership behaviours relating to activation, framing, and mobilising can be practiced in different roles that together help bridge the gap between the internal and external environment of the network. Lastly, there are certain behaviours linked to synthesising that help

to increase effectiveness internally, including necessary competencies that support such behaviour.

Activation

Respondents point out that activation of possible participants is crucial to the effectiveness of IMPEL, since this provides more resources and input to learn and take on shared projects. Most respondents are national coordinators, which means they are tasked with spreading the word on IMPEL in their country (R4).

R5: “Another issue and this is related to the problem of leadership is related to how the organization that take part in the network identify the persons that can take part of the activity of the network.”

Since it is a voluntary network, there is need to activate and motivate people to participate in projects of the network. Although participants themselves have a role in doing so, it is dependent on the member organisation they are from. It becomes more difficult if participants are not part of the organisation in which they need to activate people to join IMPEL projects. What was seen as a beneficial leadership behaviour is best described as a form of ambassador behaviour, whereby the formal leadership of the network physically visits member organisations to engage with their high-level management (R1). Similarly, organisations who are already member also need to be actively approached by the formal leadership to reactivate their participation. The high-level management can change which can also mean the end of activity of that member.

R9: “Sometimes it turns out that a previous leader in such a country, a minister has said Impel is important and then he or she is National Coordinator. Then there is a regime change and then they are suddenly completely off the radar. ... No more contact with the leadership, ... Then a mission from IMPEL goes there and tries to figure out what IMPEL can possibly do better, ... In this way, it is an ambassador role to see if you can activate the parties again.”

These activation behaviours do not necessarily reflect the expectation from the literature, but it shows how activation can be done to effectively engage in activation.

Framing

Framing behaviours relate to influencing, leveraging, and adapting the structure in such a way that it improves the effectiveness of the network. Respondents state that the effectiveness of their shared activities mostly depend on the effectiveness to which activities and lessons from the network are transferred to the national context. The effectiveness of the formal projects can be limited if the lessons are only transferred to the actual person participating in the project within IMPEL. The effectiveness of the network therefore ultimately depends on the internal mechanism for transferring the results inside your organisation.

R5: "When you decide to take part to the activity of the network you have to decide in that moment, which is your internal mechanism for transferring the results of the network inside your organization."

Multiple respondents have indicated that these mechanisms are not always embedded by participants of the network. Some did report on ways in which they created a structure that helped to transfer the lessons and output of the network to their immediate surrounding that help to ensure that what the network produces is being used. What is mentioned is some form of national structure in which everything related to IMPEL is discussed at a national level:

R7: "Spreading what you've learned, well we're bad at that. The effectiveness that you could achieve is therefore small unfortunately... I did a peer review once and there comes a report with areas for improvement ... but what one coordinator this is to invite all organizations in the country to visit them and then shared what they received for advice. Then you are doing well in sharing your knowledge."

This shows in line with the literature that adapting the structure, in this case by setting up a structure among participants from individual countries, greatly improved effectiveness. Another effective form of framing is linked to what is discussed earlier about the IRI under 'Integration mechanism and tools'. Leveraging this tool as opportunity to create contact between IMPEL and the high-level management, can increase the effectiveness by better understanding the actual organisations of participants.

Mobilising

Like activation and framing, mobilising behaviours are crucial for connecting the external surrounding to the network. This can also be done by participants through acting as ambassador of the network in their organisation and country. This is firstly important for transferring the

lessons and output of the network to a larger community as discussed under framing. Secondly, these ambassador behaviours can help to increase support of high-level management. This links back to the diversity of participants organisations, in the sense that how effective someone can participate and make use of lessons from the network, depends on the support of their management in their member organisation (R8). Acting as ambassador is thereby critical for ensuring support in organisations that do not actively support their personnel in becoming active members of the network.

R7: “I think that the home organization, rightly so, does not always see, what good is it to us? ... you can't always prove it. It is really difficult and that is a matter of years and investing and building and then eventually you say: yes, it has been helpful.”

R9: “So the people who actively participate in the IMPEL projects must also be small ambassadors. They must also have support in the organization, they do not always have to be the highest in rank, that can also be someone with enthusiasm and who knows everything well and sells things internally.”

Apart from mobilising support in the national contexts by individual participants, it is also mentioned the formal leadership plays a role in making the network known to external stakeholders.

R6: “It is very important to make sure that experts are meeting with the Commission, experts are meeting with other networks and working together when they should and making IMPEL visible in meetings of the environment, even with other international forums, because then people see it all.”

This shows that the mobilising of external support that is related to increase effectiveness indicated by McGuire and Silva (2009), can be done through active ambassador related behaviours. Internally, the effectiveness greatly depends on the ability of participants to passing on the projects and lessons from the network to their own organisation.

Synthesising

Synthesising behaviours relate to nurturing the stability in the network. There is not necessarily a single overarching activity through which synthesising can be done. Respondents do mention a set of competences and characteristics that support the ability of people in the network to effectively synthesize. Overall members most members find that experienced leadership is more important for effectiveness than leadership that is rotated between members. Previous experience with an inexperienced leader has shown that this is problematic for

effectiveness, with people leaving the network because of it. Through experience, leadership is more effective as it creates stability since people can judge the leader's intentions. Moreover, the relationships are nurtured more easily because someone knows most people in the network. Some however do prefer a rotating leader in order to remain a practitioners' network:

R13: "So I think experienced management is best, people knowing what the use and roles in IMPEL are, what you are allowed to do what you are not able to do, how you discuss with different people."

R12: "We would rather see a rotating schedule with the potential that we sometimes have a less experienced chair, rather than having chairs primarily for their board experience, because it is, and it must remain, a practitioner's network."

Either way, in voluntary transnational networks, it is important to be diplomatic in order to effectively engage in synthesising behaviours.

R7: "It is very diplomatic work. You are sometimes immensely annoyed by the representative country X who sits back and does nothing to you and only consumes. It really has a diplomatic character to it: patience, continue to treat each other nicely and take those beautiful gems back every time."

In international affairs it is about not saying things, but questioning lightly, not being blunt to other countries on sensitive issues, listening (R9). Since it is a voluntary network, top-down behaviours will not work. It should also be an approachable networker, but who is also part of the participants and a practitioner who is knowledgeable on the field. Overall, the connection to the practitioners' level is deemed most important for effective leadership:

R9: "It makes no sense to put some hotshot manager there who has absolutely no experience with leadership in the field you represent, you have to have an affinity with the content."

These findings show that in order to synthesize, managers in network should practice diplomatic behaviour. To be able to so, someone needs to be experienced, both in the network and in the context of the practitioners on the ground. This supplements the literature that effective synthesising in a transnational practitioner's network is enabled through experience and diplomatic behaviour.

6 Conclusion

This case study shows how structure and leadership behaviours determine the perceived effectiveness in a voluntary transnational network. It demonstrates the value of taking a combined approach by looking how structural and leadership behavioural dimensions relate to each other and jointly determine network effectiveness. In doing so it shows that mobilizing-activating-synthesizing-framing classification of leadership behaviours by Agranoff and McGuire (2001) can be operationalised in relation to the context of the network.

With the case of IMPEL it provides insights on how effectiveness is determined in a network specifically concerned with acting as a bridge for professionals and sharing knowledge. The findings show that participants' perception of effectiveness is dependent on how the network provides opportunities of learning, exchanging knowledge, and exerting influence on the policy process at the practitioner's level. The perception of the effectiveness of the network in providing this, is found to be determined by both the structure and leadership behaviours. In terms of structure, the main findings come down to different tensions that arise when maturing whilst remaining structured as a voluntary network governed by its members. It is the difference in participants' perceptions of what positively influences effectiveness, that actually lay bare the structural tensions. As the network grows, the diversity of members makes it more difficult to ensure effectiveness in shared activities for everyone. The findings also show that there is a tension between increasing need for more strategic thinking, whilst wanting to keep independence. The growth of the network demands more network level competencies and dedicated time, but this runs up against the wall of the voluntary nature of the network structure. This threatens the network inner stability as participants are unable to volunteer for the increasingly demanding leadership positions.

By including leadership behaviours in the analysis, it helps to connect critical behaviours to structural factors in how they are found to be helpful to deal with the different structural tensions. It shows that in a voluntary transnational network it is ambassador and diplomatic behaviours that help to activate participants and mobilise support. This links activation and mobilising behaviours to dealing with the downsides of diversity in the membership composition. This in turn, can be practiced by framing and leveraging the integration mechanisms, further substantiating the link between structure and leadership behaviours through the leveraging of the structure of the network to engage with the member organisations directly. Lastly, the synthesizing behaviour enabled through experienced leadership and diplomatic behaviour help to ensure and nurture the network inner stability.

These findings together show the value a joint approach studying network effectiveness in which structure and leadership behaviour are both considered.

This study brings the combined approach suggested by Turrini et al. 2010 into practice by looking at structure and leadership behaviour. Where McGuire (2002) in his article on "*Managing Networks: Propositions on What managers Do and Why They Do It*" mostly addressed the question of when and why certain management behaviours are used in a network setting, this case study brings into practice the question of how these management behaviours can be used effectively or what influences the capacity to use these behaviours effectively, to enhance the effectiveness of networks

Future research can help to further substantiate a combined approach into more network contexts. It can also be interesting to expand on the different perceptions of effectiveness in relation to cultural and national contexts. Based on the findings of this research, IMPEL should strike a balance between its voluntary nature and becoming an increasingly professional network.

7 References

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8 Appendices

8.1 Respondents:

Respondent number	Position in network	Country region
R1	National coordinator	Western Europe
R2	Experienced participant	Western Europe
R3	National coordinator	Eastern Europe
R4	National coordinator	Northern Europe
R5	Project leader	Southern Europe
R6	Experienced participant	Southern Europe
R7	Project leader	Western Europe
R8	National coordinator	Eastern Europe
R9	National coordinator	Western Europe
R10	Project leader	Western Europe
R11	National coordinator	Northern Europe
R12	National coordinator	Northern Europe
R13	National coordinator	Western Europe
R14	National coordinator	Northern Europe

8.2 Topic/question list

8.3 Topic List Interview research IMPEL network

Perceived effectiveness general

1. What is your position in relation to the network?
What is the purpose of your organisation in relation to participating in IMPEL?
2. How do you define a network that is effective? / What do you expect from or value for the network to be effective a whole?
3. How do you perceive IMPEL as effective as a whole and to your organisation, what elements make it so and why?
 - Can you relate it to any experiences with other European networks? Since there is also some overlap with international environmental networks (EPA, ENCA etc.)
 - What determines if you find it effective or not to be/become active in IMPEL and commit time and effort in it?
 - With whom do you relate most and why?

Perceived effectiveness and structure

4. **Formalisation and accountability;**
 - How does the structure of the network influence the effectiveness of the network to you? What do you especially value or find ineffective?
 - How effective do you perceive to be the formal meetings, agenda-setting, decision-making? Do they provide equal opportunities to engage in the network as others?
5. **Integration mechanisms and tools;**

- Through which kind of activities do you mostly engage with the network and can you engage and have your say within the network?
- With what means do you plan and carry out projects together, collaborate, share information, communicate, and share funding and resources? How effective do you perceive these means? For example the *basecamp knowledge sharing platform*

6. External control;

Do you experience any external control or influence from outside the network?

If yes: how do you feel this influences the effectiveness of the network and for you? (e.g. influence by member states, dependence on external funding, European Commission, control through a NAO etc.).

(dis)alignment between members and external influences?

7. Size and composition;

How do you feel about the composition of the different organisations and countries that are member of the network, and how it affects the effectiveness of the network? (e.g. *diversity and democratic reflection*)

8. Network inner stability;

- How do you perceive the inner stability of IMPEL in terms of the trust and strength of connections you have with other network partners? How does this impact the effectiveness of the network to you?
- It is a voluntary network, how much effect does this have on the effectiveness? Why?

Perceived effectiveness and leadership behaviour

9. What do you find important or value in terms of leadership to make the network effective?
10. How does the way the leadership acts in the network and within this structure influence the effectiveness of the network to you?
 - Activation and Mobilising;
 - i. Activate and select participants with the right knowledge and resources?
 - ii. Foster commitment and support inside the network to collectively work together?
 - Framing;
 - i. Do you feel the structure and the position of different participants is effectively leveraged by leaders in the network? How?
 - ii. Do they adapting rules/procedures, foster new modes of collaboration, new ideas in the network?)
 - Synthesising;
 - i. How is trust build (through the right communication, recognizing credit, dealing with conflict, power imbalances)?
 - ii. How does the leadership help overcome blockages and differences between members, how do you resolve conflict?
 - iii. How does the leadership influence the relational aspects, nurture stability, of the collaboration and overcome blockages and differences between members, how do you resolve conflict what is the influence on the effectiveness of the network?

11. Is there any more informal leadership going on in the network? Do you see other leaders in the network and how do they influence the effectiveness?

Closing questions

12. Is there anything that we have not covered yet in relation to how the structure and leadership determines the effectiveness of IMPEL?
13. What elements of how IMPEL functions in terms of structure and leadership, could make IMPEL more effective as a whole and for your organisation?