Intergovernmental cooperation and international sustainable mobility

A case study of the Amsterdam-London trainline

Emma Madelief Kanbier, s2132575

University of Twente, Enschede, the Netherlands

Faculty of BMS – Management, Society, and Technology, Module 12

Bachelor Thesis MS&T – 2020-20200526-2B

First supervisor: Dr. C. Matera

Second assessor: Dr. L. N. Long

July 1st, 2021

Word count: 12.000

Abstract

In this thesis, the role of intergovernmental cooperation in the policy process of the Amsterdam-London train line is researched. The focus is on how this type of cooperation can create sustainable transport options for international travel for citizens. This is analysed via a systematic literature review (open coding), where policy papers, governmental documentations, and media articles are analysed. This research shows that there is a relationship between the creation of sustainable international travel and intergovernmental cooperation. The results make clear that governments partake in intergovernmental cooperation to solve the policy issue of border controls in order to improve the train line, and to make it compete with other, less sustainable, modes of transportation. Next to that, it provides the basis for more in-depth research on the topic. This research has identified important concepts within the research topic, it shows the relationships present within the case study, and it shows the potential of sustainable mobility as topic of interest for governments, which can be achieved via intergovernmental cooperation. This thesis provides a research agenda for how this thesis can be used to set up a more in-depth analysis of the case, in order to identify create a more specific research.

TABLE OF CONTENTS

CHAPTER 1 – INTRODUCTION

On November 4th, 2016, the Paris Agreement, which was adopted by 196 countries to limit global warming and is legally binding for those who signed it, entered into force (United Nations, nd). In the beginning of 2020, all countries submitted their plans for their climate actions (United Nations, nd). At the end of 2019, world leaders travelled to Madrid to finish the last parts of the Paris Agreement and the rapport of how countries are going to battle climate change (NOS, 2019). Since the convention in Madrid is all about the climate and how to battle greenhouse emissions, one would say that the attendees would choose to travel in a sustainable manner, to give the right example to their own citizens. Ironically, the largest part of the Dutch delegation, thirty of the thirty-five attendees, decided that they would fly to Madrid, while it is generally known that this mode of mobility is less sustainable than travelling by, for example, train. The other five members that would join the rest of the delegation a week later for support would travel by train (NOS, 2019). The following explanatory statement about this was given: *"We would have to change trains four or five times. The journey time is very long, and the costs are high. Also, due to the short transfer times, there is a big chance of missing a connection."* (NOS, 2019, translated).

By giving that statement, the Dutch government perfectly sums up the problems of international train travel: it is costly, time consuming, difficult, and, overall, not user-friendly. This raises the question of how a government can expect that their citizens will travel by such a mode of transportation if they themselves do not want to promote and use this transportation mode. Next to that, in their first climate plan for the years of 2021-2030, the Dutch government does not once mention the words 'trein' (train) or 'vliegtuig' (airplane) as part of their national plan of action to tackle climate change (Rijksoverheid, 2020). Thus, while they recognized the problems for international train travel, they did not seem to want to tackle them on their own. However, it seems now that they did see possibilities to do so in cooperation with another party: The United Kingdom.

In 1993, 'the Fixed Channel Agreement' was signed by the United Kingdom, Belgium, and France. This agreement was previously used for the international train travel from Amsterdam to London, and the reason why the security checks had to be done in Brussels: the Netherlands was not part of this agreement, and thus not giving them the right to do security checks in the name of these countries. In 2020, the Dutch government signed a bilateral agreement with the government of the United Kingdom. Next to that, the Dutch government signed a four-country-treaty with the countries through which this train travels, namely the governments of the United Kingdom, Belgium, and France regarding safety and border control (Rijksoverheid (a), 2020). These new agreements are an addition and extension to the Fixed Channel Link agreement of 1993 (Rijksoverheid (b), 2020). Because of these agreements, all the security checks to enter the United Kingdom can be done in the Netherlands, which means that the train does not have to make an additional stop in Brussels, where the security check first where done, which added an hour to the travel time (Rijksoverheid (b), 2020). The process of extending and creating the new agreement had started in 2017 and ended in 2020 (Tweede Kamer, 2018). The first information about it was publicly revealed in 2016.

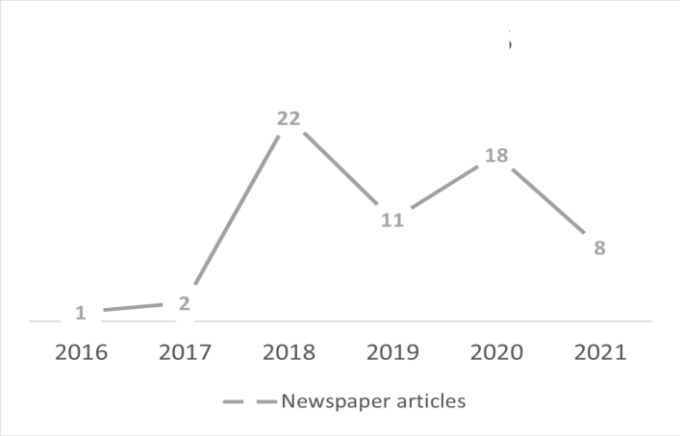
Such an international train line can make international train travel more attractive for citizens. Often, when people travel across borders, they will opt to do so by car or plane (CBS, 2019). As stated earlier, it is generally known that these transportation modes are not the most sustainable options for travelling. This, however, can also be explained by science. How 'sustainable' a mode of transportation is, can be operationalized as the 'carbon emission rate per person', which shows how much carbon a mode of transportation releases per person per trip. This emission rate is at its lowest level when, especially on shorter distances, people travel by train or other modes of public transport (Dällenbach, 2020; RTL

Nieuws, 2018). This can also be seen in the case of the Amsterdam-London trainline. This train connects two cities that are, in bird perspective, only 358 kilometres apart (distance.to, nd). To make this travel, one person would emit 63 kilograms of CO_2 by plane, and 8.17 kilograms of CO_2 by train (Eurostar, nd). This means that seven people could travel by train, for the same emission rate when one person travels by plane. In this calculation, it is not considered that the train drops people off in the centre of London, and that people travelling by airplane still need to travel from the airport to the centre, making the emission for travelling by plane even more.

Thus, travelling by train is a more sustainable manner of travel than plane or car on the same trip. This fact is even affirmed by the director of KLM, the Dutch national Flight Company. He stated that it would be better for sustainability and the environment if people would travel by train to cover shorter, international distances (RTL Nieuws, 2018). However, for people to choose the train, and thus choose the sustainable travel option, it needs to be:

1. Convenient;
2. Accessible, and;
3. Efficient for them to do so (Dällenbach, 2020).

This means that it must be more attractive to choose to travel by train than to travel by car or plane. As was already stated by the spokesman of the Dutch government, international train travel has not been attractive on any of these fronts, until now.



Graph 1 - Amount of newspaper articles covering the process 2016-2021

That this train became a more attractive mode of transportation, can for example be seen in the newspaper coverage. The public interest during the process of crafting this agreement was rising and extensively covered in the news. This gives the impression that people are willing and wanting more options in international sustainable travel. This can be seen in Graph 1 (based on Table 3, p. 8), where the media coverage about the case between January 2016 and May 2021 has been accumulated for four different newspapers.

The (policy) process of this case study has created an attractive, sustainable, international trainline, which can be seen as a new way of citizen mobility. By taking part in this process, the Dutch government has shown its interest in citizen mobility and has tackled the problems which they summed up themselves as of why train travel has never been attractive before; the train is faster, there are no stops, and one can travel to London from Amsterdam for only €44 (Eurostar, nd). To compare: a plane ticket from Schiphol Airport to London costs €34,34 up to €45, depending on the airline and airport of choice (EasyJet, nd; British Airways, nd), and booking for November 2021 in June 2021. The total travel time for travelling by plane is four to five hours, considering security checks, luggage, and the transfer from the airport to Central London. With the train, it would take five hours and ten minutes to get from Amsterdam to Central London, including an hour to get to security in Amsterdam. This would only make it take up to one hour longer to travel by train. At last, your legs have somewhat more space in a train seat, and you do not have to pay for your luggage. Summing this up, the train now can compete

with the plane on price, travel time, and comfort, making it a more attractive mode to travel with from city to city.
The cooperating governments have created and now promote an improved way of citizen mobility by solving the issues at hand via an improved and innovative policy, by cooperating with different governments. This case study shows the potential of cooperation between governments to make international sustainable travel possible. This makes one curious how the concept of 'intergovernmental cooperation' was implemented in this case, and how it can possibly be used in other cases, to reach the same goal. Would it be possible to use this same concept elsewhere, to make sustainable international travel easier and more attractive to citizens, and what can be learned from this case study?
In the context of the Amsterdam-London train line, the research question addressed in this thesis is as follows:

To what extent did intergovernmental cooperation provide opportunities for sustainable, international mobility between cities for citizens by solving policy issues across national borders in the case of the Amsterdam-London train line?

This empirical research question is addressed via open coding, which is further discussed in the next chapter. To address this research question, the following, but not limited to these, sub-questions will be researched:

1. Who are the policy actors and institutions involved in the case of the Amsterdam-London trainline?
2. What are the rules and regulations on national and international level that this case needed to conform to and make up the playing field of this policy issue, and how does this set the scope for the policy system?

After this introduction, the theoretical framework and concepts are explored. In chapter three, the research method and design are discussed. After that, the results of the analysis are discussed. Then, the sub-, and research questions are addressed, and a research is agenda proposed.

CHAPTER 2 – THEORETICAL FRAMEWORK

In this chapter of the thesis, the existing models and theories that are relevant for the research are discussed. The Ecology of Games framework is presented, as well as theory about intergovernmental cooperation. The 'Ecology of Games' framework, as proposed by Lubell (2013) is the main framework used in this thesis. In this framework, there are six core concepts, which all entail a key part of a policy process ('policy game'). The Ecology of Games framework allows to take apart the policy process in smaller bits, to help understand the specific role of these parts and how they work together.

After this framework and theory are discussed, the concepts that are present in the research question are explained and placed in the theories to make clear which role they have in this thesis.

2.1 Theory

2.1.1 Ecology of Games framework

The most prominent framework for this thesis is the 'Ecology of Games' framework. In this framework, there are six core dimensions: policy games, policy issues, policy actors, policy institutions, policy systems, and time (Lubell, 2013).

Policy issue

At the core of a policy game, there is a policy issue. A policy issue often entails a collective action problem. A collective action problem is when *"more than one individual is required to contribute to an effort in order to achieve an outcome"* (Ostrom, 2004, p. 1; Woods & Bowman, 2018). In this context, the outcome would be to solve the problem at hand by cooperation between different parties. In this framework, the concept also entails payoff and outcomes (Lubell, 2013), meaning the gains that a party can make out of cooperating, providing motivation to participate. This is discussed more extensively later in this chapter.

Policy institution and Policy actors

In a policy issue, there are different parties who collaborate to tackle the collective problem. In this framework, they are called "policy actors" and "policy institutions". While actors and institutions are different, they are connected. A policy actor is a person or a group who has a stake or an interest in the outcome of the policy issue (Lubell, 2013). A policy institution consists of a set of rules and informal norms that provide how policy actors come to make a collective decision (Lubell, 2013). Policy actors exist within the policy institutions that conform to the issues that they have stakes and interests in (Lubell, 2013).

Policy systems

The next dimension is the policy system. The policy system sets the boundaries and scope in which the policy issue and cooperation parties take place. "*Policy systems can be defined at different scales, for example local, regional, state-wide, national, and global. The choice of geographical scale determines the scope of inquiry for a particular analysis, but still leaves open the possibility of cross-scale interactions."* (Lubell, 2013, p. 542). This means that the policy systems entail the scope, which can be geographically, but also political institutions and ecological boundaries (Lubell, 2013).

Time

Another dimension that entails the scope is time. In this framework, a synonym that is used is 'change'. Time can bring change in systems, institutions, actors, and other dimensions mentioned in this framework (Lubell, 2013). Such change can be as simple as a country getting a new president or premier after elections, but it can also be a change in a country's constitution or laws. These kinds of changes can influence the dynamics, power, and positions of actors, institutions, or systems.

Policy game

Next to the core dimensions already mentioned, there are some other parts of this framework that play a role in the forming of policy games.

One of these is networks. Networks influence the way players act and how they make decisions within the policy game. It entails "*(...) single actors being related to many others or participating in multiple institutions, but also that different structural properties of an entire network may influence the behaviour of any given individual*." (Lubell, 2013, p. 553). In this framework, the network and relationship between actors and institutions is most often present and is called a "bipartite network". They are often tied together via their interests, but actors are also tied to the institutions because of the resources they have (Lubell, 2013).

Resources give actors a way in to try and deal with the problem, give them a sense of power, and to be able to pay the transaction costs entailed with participating (Lubell, 2013). This all eventually comes down to a cost-benefit analysis. If the gains are larger than the costs, it is more likely for parties to be willing to participate. The gains of a policy game can be described as policy outputs and policy outcomes. Here, outputs are the direct effect of a policy, and outcomes the real effects the policy has after some time has passed (Knill & Tosun, 2012). Policy actors will always try to use their power to gain as much as possible from the cooperation (Lubell, 2013).

The five core dimensions combined with the concepts mentioned above, form a policy game. Such a game is a place where "*actors jointly participate and make decisions according to the collective choice rules of a specific policy institution, where the outputs are operational rules that apply to issues within that institution's jurisdiction*." (Lubell, 2013, p. 540).

2.1.2 Intergovernmental cooperation

According to Woods & Bowman (2018, p. 488), intergovernmental cooperation arises when *"(...) collective action problems associated with coordination, division, and defection increase, participants will institute more formalized structures and stronger central authority in order to solve these problems.*". Meaning intergovernmental cooperation arises when such collective action is undertaken by cooperating in governmental institutions (Woods & Bowman, 2018; Lindstrom, 1998).

A collective action problem can arise anew, or it can be that a current policy does not solve the issue anymore (Woods & Bowman, 2018). However, in both cases, issues can arise that block effective intergovernmental cooperation, since they can hold back the gains of participating parties (Woods & Bowman, 2018). These issues are transaction costs and free rider problems. Transaction costs are costs associated with the costs made to get the (new) agreement in place (Woods & Bowman, 2018). These transaction costs must eventually be lower than the gains of such cooperation, for actors to have a net positive gain (Woods & Bowman, 2018). Transactions costs also forms the basis for the free-rider issue. Some actors reason that they will benefit more if the other parties pay most of the transaction costs, so that they must pay less to none (Woods & Bowman, 2018). However, such behaviour can lead to no cooperation at all, meaning that there are no gains to distribute to begin with (Woods & Bowman, 2018). When such issues are solved, intergovernmental cooperation can become an attractive means to an end. The first reason why participation would be beneficial for parties, is when the policy issue is something that now causes problems for the actor, but also is something that is high on the agenda and fits the actors' preferences (Woods & Bowman, 2018; Lindstrom, 1998). If actors decide to participate, their powers come into play. The more power an institution has, the more influence they have, but have the least to gain (Woods & Bowman, 2018). This makes weaker institutions more attracted to such cooperation, since it is likely that they will gain the most. However, if an institution has more power in the process, they are more likely to influence the design of the agreement (Woods & Bowman, 2018).

Eventually, Wood & Bowman (2018, p. 492) identify five factors that motivate parties, can lead to gains, and make intergovernmental cooperation effective:

1. Problem severity;
2. Policy preferences;
3. Institutional power;
4. The design of an agreement;
5. Collective action incentives.

2.2 Connection of theories

When these theories are combined, they influence each other as can be seen in Image 1. The variables are variables on their own, the arrows show how they are connected. All variables are influenced by time, since time can change all the variables, which is why it is presented as a border. Then all the variables together, and after being influences by time, make up the policy game.

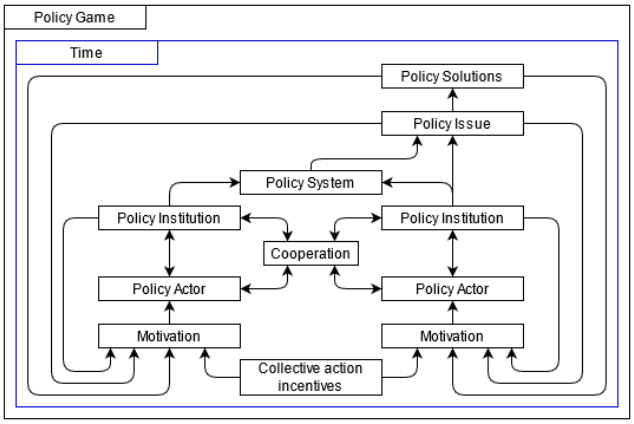


Image 1 - Connection of theories

2.3 Concepts

Throughout the first two chapters of this thesis, the concepts of 'sustainable mobility' and '(solving) policy issues' have been mentioned. Their meaning and role in this thesis are explained in this section of the thesis.

2.3.1 Sustainable mobility

Sustainable mobility is the overarching concept of this thesis. In general, it means mobility that provide green options of transport (Banister, 2008), in which there is less usage of transportation modes that rely on oil-based fuel (Barr & Prillwitz, 2008) and more focus on the role of mobility in society (Banister, 2008; Barr & Prillwitz, 2014).

In this case study, sustainable mobility comes back in the form of 'opportunities for citizens'. This refers to the possibilities and opportunities for people to have options in their choices of mobility and transportation. People now can include a train ride over a high-speed rail to travel between Amsterdam and London, where this may not have been attractive before (NOS, 2020). Now that the changes are made to the train line, it can compete with the airplane on time, price, comfort, and efficiency, all while making international travel more sustainable. By giving citizens the choice to travel sustainable across border, governments can try to make their societies more sustainable by implementing sustainable mobility policies.

2.3.2 (solving) Policy issues

In the context of this research, '(solving) policy issues' entails the solving of the issues regarding inefficient, international travel via the Amsterdam-London trainline, making that it was not a viable transportation option for citizens. For this case, it is the issues regarding the security checks in Brussels for the train line needed to be changed, so that they do not have to stop for an extra hour. To do so, the Netherlands needed to be included in the old policies, so that passengers can go through border control on all stations.

Solving the policy issue means that the status quo, in which the issue exists, is abandoned. Then a new status quo is created by making new agreements and policies, in which the issues regarding inefficient travel stood in the way of the train line being a viable transport option for citizens.

CHAPTER 3 – METHODOLOGY

3.1 Research method

To address the research question and its sub-questions, the method of 'open coding' is used for a systematic literature review. In open coding, concepts are found and established by reading sources. These concepts are made into codes, which then are applied to the rest of the sources which are used to address the research question (Holton, 2007). For this method, Atlas.ti version 9 is used.

3.1.1 Operationalisation and measurements of the concepts

As has been discussed in chapter 2, 'opportunities for citizen mobility' and '(solving) policy issues' are the main concepts of the research. To be able to measure them, two sub-questions were created. In order to answer these, literature, media, and governmental documentation are identified by searching with the use of keywords that are in line with the concepts, research question, and topic. Then three literature sources are used to establish the concepts that are often found in literature and represent the field of research and case study.

3.1.2 Literature search

For the literature search for this study, the databases of Scopus, and Web of Science (WoS) have been used. In both databases, the same keywords were entered. The results were further defined with additional filters (Table 2), to find more specific and useful literature. The results of this search can be found in Table 1. In the first column of the table, the keywords entered into the databases are shown. Then, in the second and the third column, the corresponding counts that those keywords gave in each of the databases are given, followed by the total numbers of counts per keyword in the fourth column.

Keywords	**Scopus**	**WoS**	**Total**
Intergovernmental cooperation in sustainable transportation	3	2	**5**
Intergovernmental cooperation sustainable mobility	1	0	**1**
Intergovernmental cooperation transportation	3	7	**10**
Intergovernmental cooperation mobility	3	3	**6**
International cooperation sustainable transportation	43	15	**58**
International cooperation sustainable mobility	21	13	**34**
International cooperation transportation	250	76	**326**
International cooperation mobility	882	71	**953**
Ecology of games framework	13	42	**55**
Ecology of games sustainable mobility	0	0	**0**
Ecology of games sustainable transportation	1	0	**1**
Stakeholder analysis framework sustainable transformation	33	37	**70**
Urban sustainability transformations	870	765	**1635**
Totals	**2123**	**1031**	**3154**

Table 1 - Literature found Scopus/WoS with used keywords and corresponding counts

	Additional filters subject	**Additional filters keywords**	**Additional filters categories**
Scopus	'Social Sciences' 'Environmental Science'	'Sustainable development' 'International cooperation' 'Sustainability' 'Transportation' 'Transportation policy' 'Urban Transportation' 'Public Policy'	x

WoS	x	x	'Political science' 'Public administration' 'Urban studies' 'Environmental studies' 'Environmental sciences' 'Transportation' 'Social Sciences interdisciplinary'

Table 2 - Additional filters used in databases Scopus and WoS

3.1.3 Media search

Next to literature, newspapers play an important role in this case study. They document and frame the process of the case. Policy makers, whether at local or national level are sensitive to the (local) public opinion, which makes them care about what is written and thus presented to the public about their work.

For the article's search, the thesis looked at four different newspapers. Two of these are local newspapers for Amsterdam and Rotterdam, namely 'het Parool' for Amsterdam and 'AD regio Rotterdam' for Rotterdam. The other two are at a national level, namely 'NOS' as the national newspaper for the Netherlands, and 'The Guardian' as the national newspaper for the United Kingdom. These newspapers are chosen because they are well known, read, and respected. Next to that, they represent the local and national view on the policy process, and therefore the pressure policy actors get from the framing of these media. The articles are about the media coverage about the case between January 2016 and May 2021, with one article in 2013.

The newspapers are organized according to the year in which they were written, to create an overview of the interest there was over the years in the case. This overview can be seen in Table 3. The media coverage was small until 2018, when the media coverage was at its peak. This was the year that the policy process started. Then, in 2019 there was less media attention, which then rose again in 2020, when the policy process came to an end. At last, in 2021, some articles were written about the state of the train line, and its troubles in times of COVID-19. To find these articles, keywords were entered in the sites of the newspapers, as well as Google (Table 4).

	2013	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Het Parool	1	1	1	9	3	4	1	**20**
AD regio Rotterdam	0	0	0	1	3	5	2	**11**
NOS	0	0	0	7	2	4	2	**15**
The Guardian	0	0	1	5	3	5	3	**17**
Total	**1**	**1**	**2**	**22**	**11**	**18**	**8**	**63**

Table 3 – Articles per year per newspaper Amsterdam-London train

	Keywords
Newspaper site	'Eurostar train' 'Eurostar trein' 'Amsterdam Londen trein' 'Amsterdam London train' 'Rechtstreekse trein Amsterdam Londen' 'Direct train Amsterdam London'
Google	Keywords + 'Site: www. [site newspaper]'

Table 4 – Keywords and search mechanisms newspapers

3.1.4 Policy papers and governmental documentation search

The policy papers and official documentation and information were all found at the national level of the Netherlands and the United Kingdom, and the official website of both governments.

Policy papers and governmental documentation are important for this research, because they show the policy process, but also the way of working of the respective governments, and their thoughts about the process. The policy papers and governmental documentation that were found were searched on the website of the Dutch and British governments. In Table 5, the keywords, and the respective count of what was found is presented.

Website	**Keywords**	**Count**
Rijksoverheid.nl	'Eurostar trein' 'Amsterdam Londen trein' 'Rechtstreekse trein Amsterdam Londen' 'Verdrag trein Amsterdam Londen'	**11**
Gov.uk	'Eurostar train' 'Amsterdam London train' 'Direct train Amsterdam London' 'Agreement train Amsterdam London'	**9**
Total		**20**

Table 5 – Keywords and search mechanisms policy papers and governmental documentation

3.1.5 Codebook

The information that was found by the process described above is made into a codebook. The codes that are used to analyse the documents are concepts that were found in the following three articles:

- Sustainable transport systems: trends and policies (Pitsiava-Latinopoulou *et al*, 2006);
    - This article was found in both databases in the literature search, with the use of the keywords 'intergovernmental cooperation mobility'.
- Regional cooperation and sustainable growth: nine councils of government in Northeast Illinois (Lindstrom, 1998);
    - This article was found in the literature search, with the use of the keywords 'International cooperation sustainable mobility' and was found in the Web of Science database.
- Governing institutional complexity: the ecology of games framework (Lubell, 2013);
    - This article was found in both databases in the literature search, with the use of the keywords 'Ecology of Games framework'.

These articles provide 'general' concepts within sustainability, sustainable mobility, intergovernmental cooperation, and the main framework for this thesis. These then can be applied to more specific policy documents, media articles, and literature. The concepts identified in the articles mentioned above are all concepts which are core to this thesis. Therefore, they are of high relevance for an in-depth exploration in this chapter. In Appendix A, these concepts are presented, together with the subcategories of their codes and their definition. In total, there are nineteen concepts which are used for the coding, with in total 120 subcodes. These nineteen concepts are the code groups, the categories mentioned in the 'subcategories of the code' are the sub-codes, which exist within the codegroup. The codebook had been reviewed by a peer in order to prevent and check for potential biases. Table 6 shows how these concepts related to the questions set up at the beginning of this thesis.

RQ concept	SQ Concept	Concepts in coding
Intergovernmental cooperation	Policy actors and institutions, SQ 1	Cooperation, Networks, Six core dimensions, Projects, Media framing, Projects.
Sustainable, international mobility between cities for citizens	The Amsterdam-London trainline, SQ 1 Rules and regulations on national and international level, making up the system SQ 2	Mode of transportation, Transportation systems, Development, Environmental consequences.
Solving policy issues	x	Policy issue, Environmental consequences, Created regulations, Kind of policies, Funding.

Table 6 – Comparison concepts research question and sub questions

In total, twenty sources, are coded (Appendix B, references). The policy papers that are going to be coded are the policy papers that are referenced to in the new policy paper, since these policy papers form the basis, and sometimes remain active, for the new one.

For the governmental documentation, statements and documentations were sought out that talked about the policy issue. Lastly, the six newspaper articles were chosen based on the year and the media actor they came from. Three articles were selected from the NOS and the Guardian each, one from each year from 2016 till 2018. This was done to be able to compare the vision of the two newspapers (and thus framing in both countries) about the policy process throughout the years.

3.2 Coding

The documents have been divided in four groups, which are based on the searched done and described in this section:

1. Theory and literature (3 documents);
2. Policy Papers (7 documents);
3. Governmental Documentation (4 document);
4. Newspapers (6 documents).

The order these groups have been mentioned is also the order in which they are coded. This is to account for the language differences: in groups three and four, there are documents written in English, as well as in Dutch. Since all the codes are in English, some explanation is needed of how the Dutch sources are coded. First, groups one and two are coded, to get familiar with the codes. Then, the English government documents are coded. After that, some keywords are translated from English to Dutch to know what to be on the lookout form, after which the Dutch governmental documents are coded. The same process is followed for the media documents in group four. The coding will be done in three rounds:

- Round 1: the actors, institutions, networks, and issues;
- Round 2: time, systems, and stakes;
- Round 3: other concepts and rechecking of round one and two.

During all the three rounds, new codes can be added. This can happen when for example while reading an article, a concept that had not yet been added as a code comes up more than once and has a definition that is important to and connected with the case study. After these sources are coded, they are analysed in Atlas.ti (version 9).

CHAPTER 4 – RESULTS

In this chapter, the results of the coding set out in chapter three are discussed. At first, information about the analysis done is given. Then, an overview of general findings is given, focussing on the number of codes found in the of documents. Then the results of the analyses are shown that are more specifically focussed on addressing the research- and sub-questions, which is followed by some other findings.

4.1 Analysis

For the analysis, two methods are used. For the general finding, the 'Code-Document Table' analysis is used to gain insight into the total number of codes across different categories, i.e., per group code or per document group. For the in-depth analysis, 'Co-Oc' (Co-Occurrence) analysis is used. This shows which codes "Co-Occur", thus which codes have overlap together and thus relate to one another. The theory and literature document group are excluded from the specific analysis.

In the general findings, the total amount of codes is discussed, as well as some general notes and tendencies. As mentioned, this is done with the 'Code-Document Table'. In the analysis menu of Atlas, one can analyse the codes, code groups, and document groups (Atlas.ti User Manual, nd). This table shows how many codes are in a codegroup per document group.

In the specific findings, the concepts that are found most frequently and which are core to address the questions are analysed. This is done with the 'Co-Oc' analysis. Co-occurrence shows which codes overlap each other. With this, it is analysed how the concepts relate to each other, but also how frequently they occur. The 'Co-Oc' analysis gives two outputs: a code co-occurrence table, and a Sankey Diagram. In the table, the total number of overlaps between two codes can be seen. Next to that, the table gives a 'Co-Occurrence Coefficient' (C), which indicates the strength between the two codes, and falls between 0 and 1. The closer the coefficient is to 1, the stronger the relation (Atlas.ti User Manual, nd). For this, the following indication is used:

- $C < 0.15$ = weak relationship;
- $0.15 < C < 0,5$ = mediocre relationship;
- $0.5 < C$ = strong relationship.

A cell in the tables can be marked with two different coloured dots. A yellow dot indicates that codes can have a strong relationship, even though the coefficient is rather low, a phenomenon called "distortion", so that a closer look is needed (Atlas.ti User Manual, nd). Distortion means that even though the coefficient is low, it can be the case that a large number of a specific code is present in the analysis, meaning that for that specific code, the relationship is strong. This closer look is done via calculation of how large the percentage of the number of codes in the Co-Oc analysis is regarding the total number of times that codes are used in total. For these percentages, the same indication is used as with the C-coefficient. A red dot, however, indicates a 'redundant code', which means that a quotation is coded twice with the same code, meaning that the coefficient will exceed 1, and that it thus does not have a valid value (Atlas.ti User Manual, nd). The redundant codes were removed before the analyses was performed.

4.2 General findings

In total, nineteen of the twenty articles were coded, which produced a total of 8860 codes. The article that was not coded was one of the Policy Paper group, namely the agreement between the United Kingdom and France from 1991, document #10 in Appendix B. In this policy paper, the text could not be selected, thus could not be coded. A usable document format could not be acquired. The policy paper has been read and moved to the bibliography.

In Table 7, an overview is given of the total number of codes per codegroup per document group, with the total tallied to the ends of the tables.

	1. Theory and literature (3)	**2. Policy Papers (6[1])**	**3. Governmental Documentation (4)**	**4. Newspapers (6)**	**Total**	**Total[2]**
Ecology of Games	1073	1837	300	66	3276	2203
(policy) Issue	138	81	20	5	244	106
(policy) Actor	356	1225	217	108	1906	1550
(policy) Institution	20	478	21	2	521	501
Time	37	76	51	37	201	164
(policy) System	1	109	0	0	110	109
Media framing	1	0	1	21	25	22
stakes/interest	72	8	6	13	99	27
Funding	9	0	2	2	13	4
Project	26	0	1	0	27	1
Environmental consequences	9	0	4	7	21	12
Mode of transport	38	259	31	71	399	363
Created regulations	27	346	37	1	411	384
Network	56	6	1	0	63	7
Places	44	511	107	159	821	777
Transport system	98	178	36	24	336	238
Development	152	0	17	16	185	33
Kinds of policies	93	9	4	3	109	16
Cooperation	58	19	15	1	93	35
Totals	**2308**	**5142**	**871**	**539**	**8860**	**6552**

Table 7 – Overview of the number of codes per codegroup/document group

[1] Missing document, see Bibliography

[2]Totoal codes minus the codes from the "theory and literature" document group

Out of the one 120 subcodes, only four were not used:

- Intergovernmental economic issues (codegroup 2);
- Other stakes/interest/agenda (codegroup 8);
- Intergovernmental funding (codegroup 9);
- Local project (codegroup 10).

4.3 Specific findings

In this section of the chapter, the specific findings are presented and discussed. First, four individual codes are discussed, namely the policy issues, policy actors, policy institutions, and policy. Here, tables are presented in which the working of the Co-Oc codes and distortion are discussed and explained, while also showing the results of specific main codes and their subcategories.

After that, relationships between codes are discussed. This is done via Co-Oc analysis tables, where the number of overlaps, the coefficient, and the possibility of distortion are discussed.

4.3.1 Individual codes

Now, the results of the coding of policy issues, actors, institutions, systems are discussed.

Policy issue

In Table 8, the total number of the codes found that co-occurred ('Co-Oc codes') and the total number of codes of the subs code ('Total Codes') are stated, as well as the coefficients as given by Atlas. Then the percentage of the codes are calculated of how many of the codes occurred in this specific co-occurrence.

In Table 8, only the sub codes that have co-occurrence are mentioned. A complete overview of all the subcodes can be found in Appendix A. One thing of note is that the categories of economic and environmental issues are not present in the Co-Oc analysis, nor in these documents at all, meaning that all the codes were in the theory and literature document group.

In total, 120 codes were found in the Co- Oc analysis, with 'intergovernmental public/social issue' as the most frequent code with 77 overlaps, both in the Co-Oc and in the totals. This was often related to border and security controls across and within different countries, meaning that this is the policy issue most related to the case study. The distribution of the policy issue over the document groups can be found in Appendix C.

sub code	**Issues**	**Co-Oc codes**	**Total codes**	**Coefficient**	**% in Co-Oc**
2.3.2	Regional public/social	2	2	0,01[1]	100%
2.3.3	National public/social	13	13	0,09[1]	100%
2.3.4	International public/social	17	17	0,12[1]	100%
2.3.5	Intergovernmental public/social	77	77	0,53	100%
2.4.3	National traffic/transport	2	4	0,01[1]	50%
2.4.4	International traffic/transport	2	2	0,01[1]	100%
2.4.5	intergovernmental traffic/transport	7	7	0,05[1]	100%
Totals		**120**	**122**		**98,4%**

Table 8 – Co-Oc coefficients policy issues

[1] Possible distortion

Policy actors

The subcode of policy actors is connected to codegroup 3 of actors, which makes it possible to see how many actors on each level are mentioned. The division between the number of codes per actor can be seen in Table 9. The most frequently mentioned actors are the national and intergovernmental actors. The actors 3.6-3.9 are the less important policy actors, since they can influence the policy process, but they are not directly involved.

The most frequently mentioned actors are the government of the countries that were involved in the policy process. These are the governments of the UK, NL, BE, and FR, and were most frequently coded as national and intergovernmental actors in the policy papers documents group (Appendix C).
In Table 9, some subcodes have possible distortion. As can be seen in the last column, the relationship between three of the actor types can be indicated as 'strong', even though the coefficient is low. However, for the 'other actors' the relationship was indicated correctly by the coefficient. For the 'media actor', the total percentage is 233%. For the coding, the entire articles for the newspapers are given the code of 'media actor' to be able to analyse the framing within the article. This makes that all the policy actors mentioned in the articles are also indicated as a media actor, giving this percentage. Because of this, this sub-code is not useful for this part of the analysis.

sub code	Actors	Co-Oc codes	Total codes	Coefficient	% in Co-Oc
3.1	Local	6	6	0,01[1]	100%
3.2	Regional	7	7	0,01[1]	100%
3.3	National	624	743	0,54	84%
3.4	International	41	41	0,04[1]	100%
3.5	Intergovernmental	552	552	0,53	100%
3.6	Private	3	174	0,00	1,7%
3.7	Passenger	0	118	0,00	0%
3.8	Other	4	75	0,00[1]	5,3%
3.9	Media	14	6	0,01[1]	233%
Totals		**1251**	**1722**		**72,6%**

Table *9 – Co-Oc coefficients policy actors*

[1] Possible distortion

Policy institutions

The subcode of policy institutions is connected to codegroup 4 of institutions. There are five levels on which an institution can be active, as shown below in Table 10.

The most frequently coded institution is the national institution. In the context of this case study, this mostly entails the national laws of the cooperating parties since these set the rules in which the new regulations have to fit and give the parties their power and resources to cooperate. As is then expected the coding of the institutions is mostly found in the policy papers (Appendix C).

As can be seen in Table 10, almost all the subcodes have possible distortion. After further analysis was done, it showed that all of the cells indeed hold a strong relationship with the policy institutions, since 100% of the total codes are present in the Co-Oc.

sub code	Institutions	Co-Oc codes	Total codes	Coefficient	% in Co-Oc
4.1	Local	3	3	0,01[1]	100%
4.2	Regional	3	3	0,01[1]	100%
4.3	National	281	281	0,55	100%
4.4	International	57	57	0,11[1]	100%
4.5	Intergovernmental	163	165	0,32	98,8%
Totals		**507**	**509**		**99,6%**

Table 10 – Co-Oc coefficients policy institutions

[1] Possible distortion

Policy systems

The subcode of policy systems is connected to codegroup 5 of systems, which makes it possible to see how many systems on each level are mentioned. This is shown in Table 11.

sub code	Systems	Co-Oc codes	Total codes	Coefficient	% in Co-Oc
5.1	Local	2	2	0,0[1]	100%
5.2	Regional	0	0	-	-
5.3	National	90	90	0,87	100%
5.4	International	9	9	0,09[1]	100%
5.5	Intergovernmental	8	8	0,08[1]	100%
Totals		**109**	**109**		**100%**

Table 11 – Co-Oc coefficients policy systems

[1] Possible distortion

Three out of the five subcodes are marked to have possible distortion. When these are analysed further, it is seen that they all have a stronger relationship with the main code ‘policy system’ than the coefficient

indicates. Regional systems are not coded at all, meaning that this code only occurred in the literature and theory document group. All the other systems were only coded in the policy paper document group (Appendix C).

In total, there are 109 systems coded, with the most frequent sub code being ‘national system’. The coded systems often exist out of the word ‘territory’, which was coded as a national system 83 times. ‘Territory’ is an indication of the border of a country something is limited to. In the context of this case study, this often means the territory in which the regulations apply, or in which territory executing parties have rights in.

4.3.2 Relationship between codes

Now the relationships between the codes are explored. This is done by looking at six different relationships, as can be seen in Image 2, and mentioned below:

1. Motivation and policy actors;
2. Policy actors and institutions;
3. Policy actors, policy institutions and cooperation;
4. Policy institutions and policy systems;
5. Policy institutions, policy system, and policy issues, and;
6. Policy issues and policy solutions.

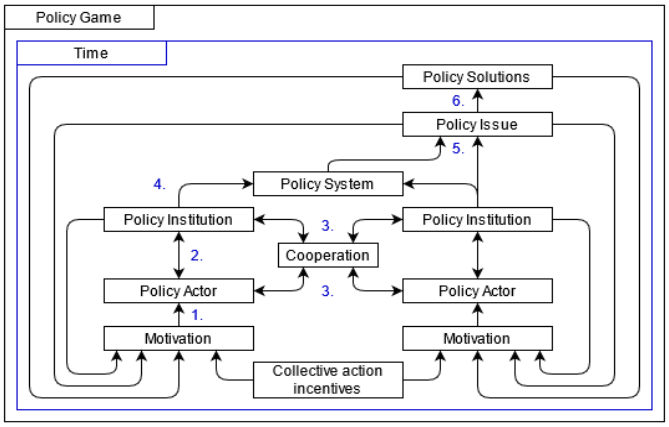


Image 2 - Connection of theories with numbered relationships

To come to some concepts as mentioned in Image 2, codes are combined. This means that some concepts are made up out of more than one code. This is based on Table 6 on page 10. Note: if codes that are mentioned in the explanation of the relationship do not show up in the table, they are not present in the analysis results as given by Atlas.ti, since there is no overlap.

Under the tables presented, extra information is given about the codes with possible distortion. This is done with two percentages of the total amount of codes as part of the Co-Oc analysis. The first percentage is in relation to the row of the cell, the second percentage to the column. All analyses are done twice, where the second time, the rows and columns are switched. If the results for this are different, it is discussed, otherwise, only one output of the results is given.

Relationship 1 - Policy actors and motivations

At the core of a policy game, there are the motivations for actors to participate in institutions and/or in the cooperation. In the case of the Amsterdam-London trainline, the reasons to participate can be found in the following codes, and are based on the ideas proposed by Wood and Bowman (2018):

- Stakes/interests/agenda (Collective action incentives);
- Media framing (Collective action incentives);
- Policy Institutions;
- Policy Issue, and;
- Policy solution.

The five types of actors which have a strong relationship with policy actors as shown in Table 9 are used. The same goes for institutions and issues. Table 12 shows the relation between the mentioned codes. It shows the number of times a concept is coded in the brackets after the concept, he amount of overlap, the coefficient in the brackets, and whether the code could have distortion.

	National actor (743)	International actor (41)	Intergovernmental actor (552)	Total
Policy issue (146)	5 (0,01)	2 (0,01)	2 (0,00)	**9**
Policy institution (513)	214 (0,21)	4 (0,01)[1]	186 (0,21)	**404**
Policy solutions (389)	-	-	23 (0,03)	**23**
Neutral media framing (4)	3 (0,00)[2]	1 (0,02)[3]	-	**4**
Negative media framing (5)	4 (0,01)[4]	-	-	**4**
National stakes/interests (11)	2 (0,00)[5]	1 (0,02)	-	**3**
Totals	**228**	**8**	**211**	**447**

Table 12 – Co-Oc analysis motivation-policy actors

[1] Possible distortion. The total % of the code in this Co-Oc is 9,8% / 0,78% [2] Possible distortion. The total % of the code in this Co-Oc is 75% / 0,40%
[3] Possible distortion. The total % of the code in this Co-Oc is 25% / 2,4% [4] Possible distortion. The total % of the code in this Co-Oc is 80% / 0,54%
[5] Possible distortion. The total % of the code in this Co-Oc is 18,2% / 0,27%

This Co-Oc analysis indicated that the motivation for national and intergovernmental actors is mostly influenced by policy institutions, since the overlap between those codes is the largest. However, it should be noted that this analysis does not provide insight in which aspect of the institution provides this motivation. Another interesting note is that the media framing that is connected to the actors are those which show negative or neutral framing. Out of the codes with possible distorting, the following cells have a stronger relationship than the coefficients show: 2, 3, 4, and 5. This is because at least one of the percentages exceeds 15%, meaning that there is a mediocre to strong relationship.

Relationship 2 - Policy actors and institutions

Policy actors and institutions are interrelated: they influence each other both ways around. Often, actors are members of an institution, but institutions can also be related to a single actor. The codes which proved to have a strong relationship in section 4.3.1 of this thesis are used. The results of this analysis can be seen in Table 13.

	National institution (218)	International institution (57)	Intergovernmental institution (165)	Total
National actor (743)	196 (0,24)	-	6 (0,01)	**202**
International actor (41)	3 (0,01)[1]	1 (0,01)	-	**4**
Intergovernmental actor (552)	180 (0,28)	-	7 (0,01)	**187**
Totals	**379**	**1**	**13**	**393**

Table 13 – Co-Oc analysis actors-institutions

[1] Possible distortion. The total % of the code in the Co-Oc is 7,3% / 5,3%

This Co-Oc analysis shows that the relationship presents are of mediocre strength, and that the strongest relationships present are those between the national and intergovernmental actors with the national institution. The rest of the relationships are weak.

The relationship between national and intergovernmental actors, and the national institutions found in the coding, are in line with the theory. Often an actor is both national and intergovernmental, since they represent their country, but partake in the policy process on intergovernmental level in this case. Because of this, they fall in their national institution, namely their own law, regulations, and political system.

Relationship 3 - Policy actors, institutions, and cooperation

Policy actors and policy institutions cooperate with each other, to in the end come to an agreement that addresses the policy issue. Cooperation is, in this case study and analysis, made up out of different codes:

- Cooperation;
- Networks, and;
- Projects.

For the actors and institutions, the sub-codes proven to have a strong relationship in section 4.3.1 of this thesis are used. This combined gives the following Co-Oc table:

	National actor (743)	**International actor (41)**	**Intergovernmental actor (552)**	**Intergovernmental institution (3)**	**Total**
Intergovernmental network (2)	1 (0,00)[1]	-	-	-	**1**
International cooperation (6)	1 (0,01)[2]	2 (0,04)[4]	-	-	**3**
Intergovernmental cooperation (27)	3 (0,00)[3]	1 (0,01)	2 (0,00)[5]	1 (0,01)[6]	**7**
Totals	**5**	**3**	**2**	**1**	**11**

Table 14 – Co-Oc analysis actors, institutions, and cooperation

[1] Possible distortion. The total % of the code in this Co-Oc is 50% / 0,13% [2] Possible distortion. The total % of the code in this Co-Oc is 16,7% / 0,13%
[3] Possible distortion. The total % of the code in this Co-Oc is 11% / 0,40% [4] Possible distortion. The total % of the code in this Co-Oc is 33,3% / 4,9%
[5] Possible distortion. The total % of the code in this Co-Oc is 7,4% / 0,36% [6] Possible distortion. The total % of the code in this Co-Oc is 7,4% / 33,3%

The Co-Oc analysis shows that there is not a large total amount of overlap between the codes, and that the strength of the relationships are often low. However, when looked at the overlaps found, it can be seen that national actors are the once most partaking in intergovernmental cooperation.

A total of 11 overlaps was found. For the possible cells with distortion, the overlap between the following codes has stronger relation than the coefficient shows: 1, 2, 3, and 6. This is because at least one of the percentages exceeds 15%, meaning that there is a mediocre to strong relationship.

Relationship 4 - Policy institutions and policy systems

Policy institutions make up part of the policy system, it sets the borders for the laws and regulations within the system, which also clarifies to which country borders the system is set. Table 15 shows the relationships between the different types of institutions and the different types of systems.

	National system (90)	**International system (9)**	**Intergovernmental system (8)**	**Total**
National institution (281)	4 (0,01)	1 (0,00)[1]	-	**5**
International institution (57)	1 (0,01)	3 (0,05)[2]	-	**4**
Intergovernmental institution (165)	2 (0,01)	-	1 (0,01)[3]	**3**
Totals	**7**	**4**	**1**	**12**

Table 15 – Co-Oc analysis policy institutions and policy systems

[1] Possible distortion. The total % of the code in this Co-Oc is 0,36% / 11,1% [2] Possible distortion. The total % of the code in this Co-Oc is 5,3%% / 33,3%
[3] Possible distortion. The total % of the code in this Co-Oc is 0,06% / 12,5%

This analysis shows that the national institution and the national systems have most overlap, as well as the international institution and the international system. It is logical that those overlaps often happen on the same level, since the institutions, mostly laws, often apply to a certain territory, thus system.

The total amount of codes that overlap is 12. This is most likely due to the low number of times 'policy systems' are coded. The overlaps range from zero to four, with the most being found in the 'national institutions' and 'national systems. The following code has a stronger relationship than the coefficient shows, due to distortion:

- International institutions and international systems (overlap: 33,3% for international systems).

Relationship 5 - Institutions, systems, and issues

Eventually, the institutions and the system come together in the policy issue. There, they come together in the policy issue that is relevant for the policy institutions (and their actors) within the set borders. In Table 16, the results of the Co-Oc analysis are shown for the institutions and systems on the one hand, and the policy issues on the other hand.

	National public/social issue (13)	**International public/social issue (17)**	**Intergovernmental public/social issue (77)**	**National transport/traffic issue (4)**	**Total**
National institution (281)	-	-	2 (0,01)	-	**2**
International institution (57)	-	1 (0,01)	1 (0,01)	-	**2**
Intergovernmental institution (165)	1 (0,01)[1]	1 (0,01)[2]	1 (0,00)	1 (0,01)[4]	**4**
Intergovernmental system (8)	-	-	1 (0,01)[3]	-	**1**
Totals	**1**	**2**	**5**	**1**	**9**

Table 16 – Co-Oc analysis institutions, systems, and issues

[1] Possible distortion. The total % of the code in this Co-Oc is 0,61% / 7,7% [2] Possible distortion. The total % of the code in this Co-Oc is 0,61% / 5,9%
[3] Possible distortion. The total % of the code in this Co-Oc is 12,5% / 1,3%. [4] Possible distortion. The total % of the code in this Co-Oc is 0,61% / 25%

There are in total 9 instances of overlap between the subcodes of the main categories mentioned. The institutions and systems are only overlapping on the national level and up, and that they mostly overlap with issues on the same levels. This can be explained via the theory because motivation is, among other things, based on the severity of the problem. One can imagine that the problem is the most serious for a party if it happens on the level they are active on. In line with what was seen earlier this analysis, not all the types of issues are present in the analysis.

For the following cell, the relationship between the codes is stronger than the coefficient indicates due to distortion:

- Intergovernmental institutions and national transport/traffic issues (overlap: 25% for national transport/traffic issues).

Relationship 6 - Policy issues and created policies (solutions)

In the end, the policy issues leads to created policies, which try to tackle the core of the problem through cooperation. In Table 17, the Co-Oc for policy issues and the created policies is shown. Next to the sub codes, the main codes for the issues and the solutions are included. Next to the issues, the kind of policies, funding, and environmental consequences are included, to see whether those are connected to the created policies.

	Policy issue (146)	**Economic policy (8)**	**Social/ Public policy (2)**	**Transport/Traffic policy (5)**	**International public/social issue (17)**	**Intergovernmental public/social issue (77)**	**Intergovernmental traffic/transport issue (7)**	**Total**
Policy solution (389)	11 (0,02)	1 (0,00)[3]	1 (0,00)[4]	4 (0,01)[6]	1 (0,00)[8]	3 (0,01)	1 (0,00)[10]	**22**
Created regulations national level (11)	2 (0,01)[1]	-	-	-	1 (0,04)	2 (0,02)[9]	-	**5**

Created regulations international level (14)	1 (0,01)[2]	1 (0,05)	1 (0,07)[5]	-	-	-	1 (0,05)	**4**
Created regulations intergovernmental level (359)	7 (0,01)	-	-	3 (0,01)[7]	-	1 (0,00)	-	**11**
Totals	**21**	**2**	**2**	**7**	**2**	**6**	**2**	**42**

Table 17 – Co-Oc analysis issues and policies

[1] Possible distortion. The total % of the code in this Co-Oc is 18,2% / 1,4% [2] Possible distortion. The total % of the code in this Co-Oc is 7,1% / 0,7%
[3] Possible distortion. The total % of the code in this Co-Oc is 0,26% / 12,5% [4] Possible distortion. The total % of the code in this Co-Oc is 0,26% / 50%
[5] Possible distortion. The total % of the code in this Co-Oc is 7,14% / 50% [6] Possible distortion. The total % of the code in this Co-Oc is 0,82% / 80%
[7] Possible distortion. The total % of the code in this Co-Oc is 0,84% / 60% [8] Possible distortion. The total % of the code in this Co-Oc is 0,26% / 5,9%
[9] Possible distortion. The total % of the code in this Co-Oc is 18,2% / 2,6% [10] Possible distortion. The total % of the code in this Co-Oc is 0,26% / 14,3%

As can be seen in Table 17, most often, a policy solution is a transport/traffic policy, and it is for an intergovernmental public/social issue. This was mostly done by creating rules and regulations of the intergovernmental level. This is in line with the analyses done earlier in this chapter. In total, there are 41 overlapping codes, with the most, 11, between the 'policy solution' and 'policy solution' codes, which are the main codes. Overall, the relationships present are weak.

For the possible cells with distortion, the overlap found in the cells marked 1, 3, 4, 5, 6, 7, and 8 have a stronger relation that the coefficient shows, since at least one of the percentages is higher than 15% meaning that there is a mediocre to strong relationship.

4.3.3 Other findings

In this section, two other findings are shortly discussed, namely 'sustainable mobility', and 'time'.

Sustainable mobility

Sustainable mobility is one of the main concepts within this thesis. In order to measure its role within the documents, the following codes are combined:

- Environmental consequences;
- Transport systems, and;
- Development.

These three codes are set out against the different modes of transportation found within the documents.

As can be seen in Table 19, there is a total of 222 overlaps found. The most overlaps exist between "train" and "international transport system". This is because the term is "Channel Fixed Link" is often mentioned in the policy papers, which is coded as a both "train" and "international transport system", since this is the under-water train line between France and the UK this train uses.

For the possible cells with distortion, the overlap between all the codes has stronger relationship than the coefficient shows, except for the cell marked with a '5'.

	Positive environmental consequences (10)	Negative environmental consequences (2)	Regional transport system (1)	National transport system (8)	International transport system (224)	Sustainable transport system (20)	Economic development (4)	Sustainable development (4)	Total
Airplane (18)	1 (0,04)	1 (0,05) [2]	-	1 (0,04)	2 (0,01) [5]	-	-	-	**5**
Car/motor (1)	-	-	-	-	1 (0,00) [6]	-	-	-	**1**
Metro (4)	-	-	-	1 (0,09)	2 (0,01) [7]	1 (0,04)	-	-	**4**
Train (338)	5 (0,01)[1]	-	1 (0,00) [3]	2 (0,01) [4]	196 (0,54)	15 (0,04) [8]	1 (0,00) [9]	2 (0,01) [10]	**222**
Totals	**6**	**1**	**1**	**4**	**201**	**16**	**1**	**2**	**232**

Table 18 – Co-Oc analysis sustainable mobility

[1] Possible distortion. The total % of the code in this Co-Oc is 1,5% / 50% *[2] Possible distortion. The total % of the code in this Co-Oc is 5,56% / 50%*
[3] Possible distortion. The total % of the code in this Co-Oc is 0,30% / 100%. *[4] Possible distortion. The total % of the code in this Co-Oc is 0,59% / 25%*
[5] Possible distortion. The total % of the code in this Co-Oc is 11,1% / 0,9% *[6] Possible distortion. The total % of the code in this Co-Oc is 100% / 0,45%*
[7] Possible distortion. The total % of the code in this Co-Oc is 50% / 0,9%. *[8] Possible distortion. The total % of the code in this Co-Oc is 4,4% / 75%*
[9] Possible distortion. The total % of the code in this Co-Oc is 0,30% / 25% *[10] Possible distortion. The total % of the code in this Co-Oc is 0,59% / 50%*

Time

Time is the overlapping concepts, that influences all the variables as mentioned in Image 1 and Image 2. In order to give a short overview, a Co-Oc analysis is given of the how the main code of "time" is divided in the different years of the policy process. The results are given in Table 19.

sub code	Time	Co-Oc codes	Total codes	Coefficient	% in Co-Oc
6.1	2016	10	10	0,05[1]	100%
6.2	2017	6	6	0,03[1]	100%
6.3	2018	23	23	0,11[1]	100%
6.4	2019	14	14	0,07[1]	100%
6.5	2020	45	45	0,22	100%
6.6	2021	5	5	0,02[1]	100%
6.7	< 2016	59	59	0,29	100%
6.8	> 2021	2	2	0,01[1]	100%
Totals		**164**	**164**		100%

Table 19 – Co-Oc coefficients policy institutions

[1] Possible distortion

In total, there were 164 codes, with the most being "< 2016". Most of these hits can be found in the Policy Paper group, with 50 codes. These are often coded in regard to the earlier agreements that are mentioned in the policy papers, which often date from before 2016. All the cells with possible distortion have a strong relationship with the main concept of time.

CHAPTER 5 – CONCLUSION

Now, the results are used to discuss and address the sub-, and research questions. Then, a research agenda is proposed, and the thesis is concluded.

5.1 Sub questions

The following two sub questions are addressed:

1. Who are the policy actors and institutions involved in the case of the Amsterdam-London trainline?
2. What are the rules and regulations on national and international level that this case needed to conform to and make up the playing field of this policy issue, and how does this set the scope for the policy system?

5.1.1 Policy actors and institutions

The analysis shows that the most frequent mentioned actors are the national and intergovernmental actors (Table 9), and the most frequent mentioned institutions are the national and intergovernmental institutions (Table 10). When the two codes of actors and institutions are set against each other, these two actors have the most overlap with the national institutions (Table 13), respectively 196 and 180, both with a mediocre relationship. When looking at the theoretical framework, this finding is logical, and the relationship found expected. As stated by Lubell (2013), policy actors and institutions are often connected, and it is logical that they are the most connected on the same level in the data analysed: an actor, in this case a representative of a government, is bound to the institution that is their country, government, and regulations.

In the data, one actor is often coded as both a national and intergovernmental actor, and this actor is often part of a national institution. An example: in the Special Agreement between the Netherlands, the UK, Belgium, and France (2020), these four governments are often mentioned or referred to (for example via the term “Host State”). They are first of all a national actor: they act out of the interest of and represent the country, meaning they are part of a national institution. However, these governments are also intergovernmental actors since they partake in this intergovernmental policy process and agreement. In the documents, the parties most frequent coded with these labels are (references to) the governments of the Netherland, United Kingdom, Belgium, and France, making them the policy actors and institutions most heavily involved in the policy process.

Institutions can also play a role in the motivation for actors to participate in intergovernmental cooperation, namely via their power and resources they can offer their actors (Lubell, 2013; Woods & Bowman, 2018; Table 12). However, there is not differentiated in the coding of institutions to account for what the rules and regulations of an institution are, and for example the power of institutions. For this, more research is needed. It can also be argued that other data needs to be added to the dataset, in which it is discussed which resources (for example funding) institutions and actors put in process. This can be found in documents on the national level. In the Netherlands, this could take the form of an informative letter of the Cabinet (i.e., Tweede Kamer, 2018). In these letters, there is often referenced to other letters or documents that relate to the issue, which would make it possible to snowball to find more information.

5.1.2 Rules, regulations, and systems

Actors involved in the policy process need to adhere to their national laws and regulations. However, there are other rules and regulations the involved parties need to consider. Those rules and regulations can be found on international and intergovernmental level, and are summed up at the start of the new agreement between the four mentioned parties. On intergovernmental level, the (additional) Sangatte Protocol, the 1993 agreement (1993), and the agreement concerning Immigration Control on Rail

Traffic between the UK and BE (2013) need to be considered (Vierlandenverdrag, 2020). On the international level, there are regulations of the European Union that some of the contracting parties are bound to, namely the Schengen borders Code (for which it can be argued that it is an intergovernmental level), regulations for the examining of a person outsides one's member state, and regulations regarding the protection of personal data of people (Vierlandenverdrag, 2020).

The most frequent mentioned systems are the national system (Table 11). The coded systems in the documents are often via the word "territory", since this entails the scope of rules, regulations, and borders, as described in the theory (Lubell, 2013). When looked at the relationship between institutions and systems (Table 15), it is seen that the relationship is weak. It was expected to find more systems in the current dataset, since these sources describe the created rules and regulations, in which the scope should be extensively discussed. One possible solution for this to broaden the theoretical paradigm set out in this research. This could for example be done by adding the Institutional Collective Action (ICA) framework, as set out by Feiock (2013), where institutions are discussed, as well as the scope they set as they are part of a policy dilemma. The inclusion of this framework could also lead to more specific codes to apply to the current dataset. The current dataset should be able to fill the missing knowledge in the systems of this case study when other/extra codes are set up.

5.2 Research question

At the start of this thesis, the following research question was set out:

To what extent did intergovernmental cooperation provide opportunities for sustainable, international mobility between cities for citizens by solving policy issues across national borders in the case of the Amsterdam-London train line?

The first concept of interest in this question is "Sustainable, international mobility". In this case study, it entails the international transport system by train (Table 18), which was achieved in order to solve "intergovernmental public/social issues" (Table 8), which mostly entailed safety and security via "border controls", as it is often called in the policy papers. In Table 18, it can be seen that there is overlap between "created regulations in intergovernmental level" and "intergovernmental public/social issue". The following quote presents this overlap: "*In the case of a Contracting Party that applies the Schengen acquis in full, border controls on persons shall be effected in accordance with the detailed rules laid down in the Schengen Borders Code.*" (Vierlandenverdrag, 2020, p. 5). Here, "border controls" is the policy issue, relating to public safety, whereas the whole quote is the solution created via intergovernmental cooperation, where there is also reference to the rules and regulations already in place. However, while this is a good example, Table 17 shows that there is a weak relationship between the two codes. This is probably the caused by the low level of overlap found in Table 18, which represents the solutions of the policy issues. One possible cause is that the codes are set up too broad, meaning that they are difficult to apply to in-depth policy papers.

The same issue is found in research on the role of intergovernmental cooperation in this case is discussed in Table 14. As can be seen there, the number of overlaps found is low, and the relations found weak to mediocre of strength. However, there is one quotation that shows the potential of this relationship: "*The Netherlands has investigated with the other countries what would be the best and quickest way to realise the international agreements with the other countries, either an amendment of the current Tripartite Treaty into a Quadripartite Treaty (whereby the Treaty is adapted to the current (security) situation in the EU) or separate bilateral treaties.*" (Tweede Kamer, 2018 (a), p.2, translated). Here, the cooperation with other governments in mentioned in relation to the policy issue to make a new agreement, so that the border and security controls can be carried out in the Netherlands.

To conclude, intergovernmental cooperation played a role in the new and improved train line, providing sustainable transportation choices for their citizens. This research shows the potentional of the topic, but further research is needed to analyse in-depth how the role of intergovernmental cooperation can be placed within this case study, and to what extent it was used.

5.3 Research agenda

As mentioned throughout the conclusion, more in-depth research is needed to be able to address this research topic in full. Therefore, the research agenda has two topics it proposes further research on.

5.3.1 Theory

In this research, the Ecology of Games framework and Intergovernmental Cooperation theory are used and fused together. However, for in this case study, it would be interesting to integrate a theory about cooperation between governments in the field of sustainable mobility specifically. This theory can provide insight into how governments approach sustainable mobility, and how they like to act, how they perceive policies and issues, and how and why they tend to seek out cooperation. This information then can be combined with the Intergovernmental theory used in this research, meaning that the relationships would change to Image 3. Next to the change in the kind of cooperation, it is expected that, for example, other types of influences for the motivation of actors are found, meaning Image 3 can still be further expanded and changed.

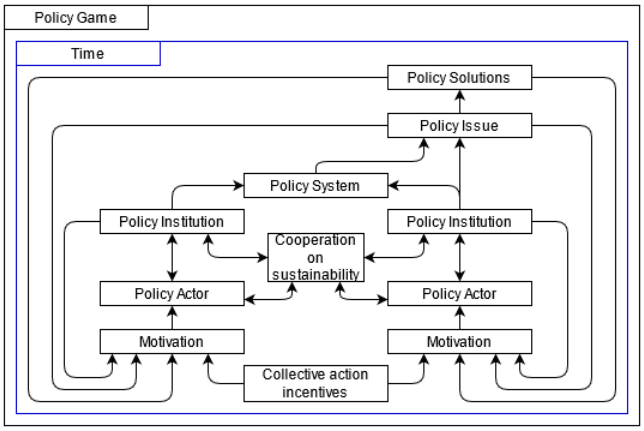


Image 3 - Connection of more theories in future research

Other than the, for this case study, it would be of added value to include the ICA framework as presented by Feiock (2013). This framework can be used to further define some of the concepts mentioned, as well as provide more insight in the motivation actors can have to collaborate.

The current used theoretical framework, in combination with the other two sources used to determine the concepts for coding were sufficient. They provided a good, general overview of the most important concepts in this case study, and almost all of the codes were used. Next to that, the current used theories gave a very good base to understand this case study. However, for further research, more, and more specific, theory is needed to identify all the information that can be found in the sources.

5.3.2 Methodology

The method and analysis used in this research is adequate and useful. With the method of open coding in a systematic literature review, the policy papers and the other documents can be analysed in-depth, and the coherence between the concepts across sources identified.

The current data and findings are a good basis for this. The sources now coded can be used again and can be used to snowball into new sources. Next to that, the findings can be used to identify which concepts are viable, which concepts are found in the theory, but not applicable to this case. This information then can be used to set up new codes, but also determine for which concepts, other theory and background are needed. Next to that, this research had the limitation of time. Because of this, not all the six core dimensions of the Ecology of Games framework could be analysed, and the policy game could not be created fully. Most importantly, the concept of time, which was coded, could not be analysed further than the general findings (Table 19). Next to that, there was not enough time to apply other theories than the two set out now.

This leads to the following topics, amongst others, for further:

- Creating a more specific codebook, for which this research and results can be used as guidelines;
- A more in-depth analysis into the role of time within this case study, and;
- Creating the policy game of this case study.

For the creation of a more specific codebook, the current concepts need to be broken apart. For instance, the different roles a policy institution can have need to have their own codes, so that their separate roles can be investigated. The same goes for a more specific break down of the policy issues, and the created rules and regulations.

All in all, this case study shows that intergovernmental cooperation had potential to set up sustainable, international modes of transportation. It can thus be used to further investigate the concepts and their relations.

REFERENCES

Atlas.ti User Manual, nd. 'Atlas User Manual - Windows'. https://doc.atlasti.com/ManualWin.v9/Intro/IntroductionPreface.html

Banister, D. (2008). The sustainable mobility paradigm. *Transport policy*, *15*(2), 73-80.

Barr, S., & Prillwitz, J. (2014). A smarter choice? Exploring the behaviour change agenda for environmentally sustainable mobility. *Environment and Planning C: government and policy*, *32*(1), 1-19.

British Airways, nd. 'Amsterdam to London flight selection'. Found on June 22nd, 2021, on https://www.britishairways.com/travel/book/public/en_gb/flightList?onds=AMS-LHR_2021-11-04&ad=1&yad=0&ch=0&inf=0&cabin=M&flex=LOWEST

CBS, 2019. 'Nederland langs de Europese meetlat' https://longreads.cbs.nl/europese-meetlat-2019/vakanties/

Dällenbach, N., 2020. Low-carbon travel mode choices: The role of time perceptions and familiarity. Transportation Research Part D: Transport and Environment, 86, 102378.

Distance.to, nd. 'Afstand van Londen naar Amsterdam'. Found on March 29th, 2021. https://nl.distance.to/Londen/Amsterdam

EasyJet, nd. Amsterdam naar Londen Gatwick. Found on June 22nd, 2021, on: https://www.easyjet.com/nl/buy/flights?isOneWay=on&pid=www.easyjet.com

Feiock, R. C. (2013). The institutional collective action framework. *Policy Studies Journal*, *41*(3), 397-425.

Governments of the United Kingdom and France, March 16th, 1986. 'Treaty concerning the construction and operation by private concessionaires of a channel fixed link.' https://treaties.un.org/doc/Publication/UNTS/Volume%201497/volume-1497-I-25792-English.pdf

Governments of the United Kingdom and Belgium, December 18th, 2013. 'Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Belgium, concerning Immigration Controls on Rail Traffic between Belgium and the United Kingdom using the Channel Fixed Link' https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/281345/8807.pdf

Government of the United Kingdom, February 4th, 2020. 'Transport Secretary hails new horizon for rail travel across Europe'. Found on June 6th, 2021 on: https://www.gov.uk/government/news/transport-secretary-hails-new-horizons-for-rail-travel-across-europe

Government of the United Kingdom, July 7th, 2020. 'New Eurostar treaties open up direct travel from Amsterdam to London'. Found on June 6th, 2021, on: https://www.gov.uk/government/news/new-eurostar-treaties-open-up-direct-travel-from-amsterdam-to-london

Governments of the United Kingdom, Netherlands, Belgium and France, July 7th, 2020. 'Agreement between the Government of the French Republic, the Government of the Kingdom of Belgium, the Government of the Kingdom of the Netherlands and the Government of the United Kingdom of Great

Britain and Northern Ireland amending and supplementing the Agreement between the Government of the Kingdom of Belgium, the Government of the French Republic and the Government of the United Kingdom of Great Britain and Northern Ireland, concerning Rail Traffic between Belgium and the United Kingdom using the Channel Fixed Link with Protocol, done at Brussels on 15 December 1993'. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908520/MS_4.2020_France_Netherlands_Belgium_UK_Agreement_amending_Belgium_UK_Fixed_Link_1993.pdf

Governments of the United Kingdom, Netherlands, Belgium and France, July 7th, 2020. 'Special Arrangement Between the Government of the French Republic, the Government of the Kingdom of Belgium, the Government of the Kingdom of the Netherlands and the Government of the United Kingdom of Great Britain and Northern Ireland concerning Security Matters relating to Trains using the Channel Fixed Link'. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908518/MS_3.2020_Special_Arrangement_Security_Matters_relating_to_Trains_Channel_Fixed_Link.pdf

Governments of the United Kingdom, Netherlands, Belgium and France, July 10th, 2020. 'Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of the Netherlands concerning Border Controls on Rail Traffic between the Netherlands and the United Kingdom using the Channel Fixed Link'. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907874/CS_Netherlands_1.2020_UK_Netherlands_Agreement_Border_Controls_Channel_Fixed_Link.pdf

Holton, J. A. (Bryant, A., & Charmaz, K. (Eds.)). (2007). *The Sage handbook of grounded theory* chapter 13. Sage.

Lindstrom, B., 1998. Regional cooperation and sustainable growth: Nine councils of government in north-eastern Illinois. Journal of Urban Affairs, 20(3), 327-342

Lubell, M. (2013). Governing institutional complexity: The ecology of games framework. Policy studies journal, 41(3), 537-559.

NOS, February 9th, 2018. 'Met de trein naar Londen, goed alternatief voor het vliegtuig?' Found on June 8th, 2021, on: https://nos.nl/artikel/2216186-met-de-trein-naar-londen-goed-alternatief-voor-het-vliegtuig

NOS, January 12th, 2019. 'Klimaattop Madrid morgen van start: 'Oorlog tegen natuur moet stoppen''. Found on May 17th, 2021 on: https://nos.nl/artikel/2312836-klimaattop-madrid-morgen-van-start-oorlog-tegen-natuur-moet-stoppen

NOS, December 23rd, 2019 (a). 'Meer internationale treinkaartjes verkocht'. Found on June 8th, 2021, on: https://nos.nl/artikel/2315949-meer-internationale-treinkaartjes-verkocht

NOS, February 4th, 2020. 'Rechtstreekse trein naar Londen vanaf 30 april'. Found on June 8th, 2021, on: https://nos.nl/artikel/2321560-rechtstreekse-trein-naar-londen-vanaf-30-april

Knill, C., & Tosun, J. (2012). *Public policy: A new introduction*. Palgrave Macmillen, Hampshire, United Kingdom.

Ostrom, E., 2004. *Understanding collective action* (No. 569-2016-39044). https://ageconsearch.umn.edu/record/16549/files/fo041102.pdf

Pitsiava-Latinopoulou, M., Basbas, S., & Christopoulou, P., 2006. Sustainable transport systems: trends and policies. WIT Transactions on The Built Environment, 89.

Rijksoverheid, January 4th, 2020. 'Klimaatplan 2021 - 2030'. Found on May 17th, 2021 on: https://www.rijksoverheid.nl/onderwerpen/klimaatverandering/documenten/beleidsnotas/2020/04/24/klimaatplan-2021-2030

Rijksoverheid (a), July 7th, 2020. 'Sneller met de trein naar Londen'. Found on May 17th, 2021 on: https://www.rijksoverheid.nl/actueel/nieuws/2020/07/07/sneller-met-de-trein-naar-londen

Rijksoverheid (b), July 10, 2020. 'Laatste handtekening gezet voor snellere treinreid naar Londen'. Found on May 17th, 2021 on: https://www.rijksoverheid.nl/actueel/nieuws/2020/07/10/laatste-handtekening-gezet-voor-snellere-treinreis-naar-londen

Rijksoverheid (c), January 22nd, 2020. Vierlanden Verdrag rapport. https://www.rijksoverheid.nl/documenten/rapporten/2020/01/22/tk-bijlage-vierlandenverdrag

RTL Nieuws, January 20th, 2018. 'Factcheck: is een lange vlucht beter voor het klimaat?'. https://www.rtlnieuws.nl/economie/column/3820751/factcheck-een-lange-vlucht-beter-voor-het-klimaat

The Guardian, February 9th, 2018. 'Eurostar to launch London-Amsterdam direct service in April'. Found on June 8th, 2021, on: https://www.theguardian.com/business/2018/feb/09/eurostar-to-launch-london-amsterdam-direct-service-in-april

The Guardian, January 4th, 2019. 'Eurostar expands London-Amsterdam service to three trains a day'. Found on June 8th, 2021, on: https://www.theguardian.com/business/2019/jan/04/eurostar-expands-london-amsterdam-service-to-three-trains-a-day

The Guardian, August 24th, 2020. Eurostar to launch direct Amsterdam to London route in October'. Found on June 8th, 2021, on: https://www.theguardian.com/business/2020/aug/24/coronavirus-eurostar-says-london-to-amsterdam-direct-is-back-on-track

Tweede Kamer, April 12th, 2018. Brief van de Staatssecretaris van Infrastructuur en Waterstaat – Spoor: vervoer- en beheerplan, nr.762. https://zoek.officielebekendmakingen.nl/kst-29984-762.html

Tweede Kamer (a), May 4th, 2018. 'Antwoorden op vragen van de leden Kröger en Ziengs over de douanecontrole Eurostar'. https://www.tweedekamer.nl/kamerstukken/kamervragen/detail?id=2018D27682&did=2018D27682

Tweede Kamer, March 4th, 2020. 'Antwoorden kamervragen over de EuroStar trein naar Londen'. https://open-pilot.overheid.nl/repository/ronl-c20a46c1-b18b-426e-a756-fc6f3e91076f/1/pdf/antwoorden-kamervragen-over-de-eurostar-trein-naar-londen.pdf

United Nations, nd. 'The Paris Agreement'. Found on May 17th, 2021 on: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

United Nations, 2002. 'Treaty Series - Treaties and international agreements registered or filed and recorded with the Secretariat of the United Nations, *No. 36320. Belgium, France and United Kingdom of Great Britain and Northern Ireland: Agreement between the Government of the Kingdom of Belgium, the Government of the French Republic and the Government of the United Kingdom of Great Britain and Northern Ireland concerning rail traffic between Belgium and the United Kingdom using the*

Channel fixed link (with protocol and declaration). Brussels, 15 December 1993' Volume 2092, p. 540-552. https://treaties.un.org/doc/Publication/UNTS/Volume%202092/v2092.pdf

Woods, N. D., & Bowman, A. O. M., 2018. *Collective action and the evolution of intergovernmental cooperation*. Policy Studies Journal, 46(3), 487-509. https://onlinelibrary.wiley.com/doi/pdf/10.1111/psj.12241?casa_token=ySn_kH_tofAAAAAA:z5O_ZDrM-AUw_gZoCApKQ1WXUmwEnRJxOB4yJo02JXufwvOfDryunsguevDahGJAiyE1eoj8_BS8Ng

BIBLIOGRAPHY

Bloemraad, I. (2012). Handbook of Research Methods in Migration. Ch. 24. What textbooks don't tell you: moving from a research puzzle to publishing findings. *Edward Elgar Publishing, Cheltenham, United Kingdom,* 502-520.

Bresciani, C., Colorni, A., Lia, F., Luè, A., & Nocerino, R. (2016). Behavioral change and social innovation through reward: an integrated engagement system for personal mobility, urban logistics and housing efficiency. *Transportation Research Procedia, 14,* 353-361.

Brömmelstroet, te, M. (2014). Sometimes you want people to make the right choices for the right reasons: potential perversity and jeopardy of behavioural change campaigns in the mobility domain. *Journal of Transport Geography*, *39*(C), 141-144.

Bulkeley, H., Coenen, L., Frantzeskaki, N., Hartmann, C., Kronsell, A., Mai, L., ... & Palgan, Y. V. (2016). Urban living labs: governing urban sustainability transitions. *Current Opinion in Environmental Sustainability*, *22*, 13-17.

Eriksson, L., Garvill, J., & Nordlund, A. M. (2006). Acceptability of travel demand management measures: The importance of problem awareness, personal norm, freedom, and fairness. *Journal of environmental psychology*, *26*(1), 15-26.

Ernst, L., de Graaf-Van Dinther, R. E., Peek, G. J., & Loorbach, D. A. (2016). Sustainable urban transformation and sustainability transitions; conceptual framework and case study. *Journal of Cleaner Production*, *112*, 2988-2999.

Feiock, R. C., Steinacker, A., & Park, H. J. (2009). Institutional collective action and economic development joint ventures. *Public Administration Review*, *69*(2), 256-270.

Füglister, K. (2012). Where does learning take place? The role of intergovernmental cooperation in policy diffusion. *European Journal of Political Research*, *51*(3), 316-349

Feiock, R. C. (2014). Institutional collective action and local government collaboration. In *Big ideas in collaborative public management* (pp. 205-220). Routledge.

Glaser, B. G. (2016). Open coding descriptions. *Grounded theory review*, *15*(2), 108-110.

Governments of the United Kingdom of Great Britain and Northern Ireland and the French Republic, 1991. 'Protocol between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the French Republic Concerning Frontier Controls and Policing, Cooperation in Criminal Justice, Public Safety and mutual Assistance Relating to the Channel Fixed Link, which entered into force 2 August 1993'. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/273137/2366.pdf

Kim, S. Y., Swann, W. L., Weible, C. M., Bolognesi, T., Krause, R. M., Park, A. Y., ... & Feiock, R. C. (2020). Updating the institutional collective action framework. *Policy Studies Journal*.

Moghaddam, A. (2006). Coding issues in grounded theory. *Issues in educational research*, *16*(1), 52-66.

Reed, M. S. (2008). Stakeholder participation for environmental management: a literature review. *Biological conservation*, *141*(10), 2417-2431.

Tweede Kamer (2018). Brief van de Staatssecretaris van Infrastructuur en Waterstaat – Spoor: vervoer- en beheerplan, nr. 739. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjo1MbAtrrxAhURVd8KHdN3Bi0QFjAAegQIAhAD&url=https%3A%2F%2Fzoek.officielebekendmakingen.nl%2Fkst-29984-739.odt&usg=AOvVaw0wZ957BnI7gKUPnhcUAMBk

Tweede Kamer (2021). Vragen gesteld door de leden der Kamer, met de daarop door de regering gegeven antwoorden, nr. 1769. https://zoek.officielebekendmakingen.nl/ah-tk-20202021-1769.html

APPENDIX

Appendix A – Concepts codebook

Code group	Concept	Subcategories of code	Definition
1	Policy game	x	One of the six (6) core dimensions of the Ecology of Games framework. "(...) The constellation of policy actors, policy institutions and policy issues at hand in a particular geographically defined policy system. A game occurs when actors jointly participate and make decisions according to the collective choice rules of a specific policy institution, where the outputs are operational rules that apply to the issues within that institution's jurisdiction." (Lubell, 2013, p. 540)
1, 2	(Policy) issue	Sort of issue: (Environmental/sustainability)/Economical/(Public/Social)/(traffic/transportation) Level of issue: local/regional/national/international/intergovernmental	One of the six (6) core dimensions of the Ecology of Games framework. A type of substantive collective action problem (Lubell, 2013). The sorts of issues are determined via the articles of Lindstrom (1998) and Pitsiava-Latinopoulou *et al* (2006). Environmental issues are where the problem is about the environment (thus also about sustainability). Economic issues are where there is a monetary issue. And a public/social issue is where the issue is regarding the public, like safety, but cannot be assigned to the previous two dimensions. Next to that, it is related to public policy. A traffic or transportation issue is an issue where a problem arises in the mobility options and possibilities for people.
1, 3	(Policy) actor	Level of actor: local/regional/national/international/intergovernmental/private/passenger/other	One of the six (6) core dimensions of the Ecology of Games framework. An actor in a party which is involved in the policy issue and has certain stakes or interests in the outcome of it (Lubell, 2013). An actor is often part of a policy institution (Lubell, 2013). Here, a division is made between an intergovernmental actor and an international actor. An international actor is in the EU, or when parties make agreements via the EU. An intergovernmental actor is an actor when it works together to make agreements with other governments, but not via the European Union. This cooperation can be done at the cross-level of the actors. This same distinction is present for all the upcoming concepts.
1, 4	Policy Institution	Level of institution: local/regional/national/international/	One of the six (6) core dimensions of the Ecology of Games framework. A policy institution "consists of a set

		intergovernmental	of formal rules and informal norms that structure how actors make collective decisions about the "operational" rules governing on-the-ground decisions about particular policy issues (...)" (Lubell, 2013, p. 541). In the codebook, this is mainly used to determine which rules and regulations are already in place before the issue is solved. This also includes the resources the institution has, and its actors can make use of.
1, 5	(policy) system	Level of system: local/regional/national/international/ intergovernmental	One of the six (6) core dimensions of the Ecology of Games framework. The policy system is about the scope of the issue. "The boundary of a specific policy system is defined primarily by the issue at hand. (...) A policy system can be defined at a different scale, for example local, regional, state-wide, national, and global. the choice of geographical scale determines the scope of inquiry for a particular analysis, but still leaves open the possibility of cross-scale interactions." (Lubell, 2013, p. 542)
1, 6	Time	<2016/2016/2017/2018/2019/2020/ 2021	One of the six (6) core dimensions of the ecology of games framework. Time is about change, since, when time passes, things can change from how they used to be (Lubell, 2013). Time is defined as the year in which an event took place.
7	Media framing	Positive/negative/neutral	The way in which the media frame the issue and topic of the case study in their articles, and thus how the issue is presented to the public. This can either be positive, negative, or neutral.
8	stakes/interest/agenda	Level of actor it is applying to local/regional/national/international/ intergovernmental/private/passenger /other	A reason or motivation why actors (within institutions) care about the issue at hand and its outcome (Lubell, 2013).
9	Funding	Level of where the funding comes from: local/regional/national/international/ intergovernmental	Monetary support for an actor/project/institution/plan/etc
10	Project	Level of project: local/regional/national/international/ intergovernmental	A plan of action to reach a certain goal. In this context mostly a plan of action to set up sustainable transport systems.
11	Environmental consequences	Positive/negative	The effect a certain event/action has on the environment.

12	Mode of transport	Airplane/boat/bus/car/cycling/metro /train/walking	The vehicle/mode people use to move between two places.
13	Created regulations	Level on which the policy is created: local/regional/national/international/ intergovernmental	A policy, rule, or regulation which is created at a certain level to tackle the policy issue at hand by the actors involved. Policy set in place to tackle the policy issue (Lubell, 2013), and it is being implemented by all the participating actors (Lindstrom, 1998). It exists out of outcomes and outputs. Policy outcomes are the eventual effect and outcomes of a policy, when some time has passed since the implementation (Knill & Tosun, 2012). Policy outputs are the immediate effect a new policy brings (Knill & Tosun, 2012). these are the function of decisions made in games (Lubell, 2013)
14	Network	Level on which the network is active: local/regional/national/international/ intergovernmental	A group of actors who are clustered together. The actors in such a cluster have ties and bonds to one other (Knill & Tosun, 2012). Via these ties, it is possible to work together, or exchange goods/information with one another.
15	Places	local/regional/national/international	A physical place located on a specific level or a place that can be found on a specific level (like a station can be found on the local level).
16	Transport system	Level on where the transport system is used: local/regional/national/international	A transportation system which is set in place at a certain level. A transport system is the way the mobility options on a certain level are organized and fulfils the transport needs on that level (Pitsiava-Latinopoulou *et al*, 2006). This also entails the length of travel the transport system provides for.
17	Development	(Environmental/Sustainability)/Economical/ (Public/Social)/(traffic/transportation)/technological Economic development is also about the economic situation of people, and therefore also job-related	Growth to improve from the status quo, which is the status currently in play (Pitsiava-Latinopoulou *et al*, 2006).
18	Kinds of policies	Different kind of policies in place when specifically mentioned: Environmental/Economical/ (Public/Social)/(traffic/transportation)/technological	Policies present in a certain type of field, which regulate certain aspects of such a field (Pitsiava-Latinopoulou *et al*, 2006).

19	Cooperation	local/regional/national/international/ intergovernmental	When two or more actors work together to reach a certain goal (Lindstrom, 1998).

Table 20 - Concepts of the codebook with their distribution and meaning

Appendix B – Sources for coding

#	Title	Author	Year	Kind of source
1	Sustainable transport systems: trends and policies	Pitsiava-Latinopoulou *et al*	2006	Literature
2	Regional cooperation and sustainable growth: nine councils of government in Northeast Illinois	Lindstrom	1998	Literature
3	Governing institutional complexity: the ecology of games framework	Lubell	2013	Literature
4	Vierlandenverdrag (supplementing the 1993 agreement)	Governments of NL, UK, BE, & FR	2020	Policy Paper
5	1993 Agreement	Governments of UK, BE, & FR	1993	Policy Paper
6	Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of the Netherlands concerning Border Controls on Rail Traffic between the Netherlands and the United Kingdom using the Channel Fixed Link	Governments of NL & UK	2020	Policy Paper
7	Treaty between the French Republic and the United Kingdom of Great Britain and Northern Ireland concerning the Construction and Operation by Private Concessionaires of a Channel Fixed Link, done at Canterbury on 12 February 1986, which entered into force on 29 July 1987	Governments of UK & FR	1986	Policy Paper
8	Special Arrangement between the Government of the French Republic, the Government of	Governments of NL, UK, BE, & FR	2020	Policy Paper

	the Kingdom of Belgium, the Government of the Kingdom of the Netherlands and the Government of the United Kingdom of Great Britain and Northern Ireland concerning Security Matters relating to Trains using the Channel Fixed Link			
9	Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Belgium, concerning Immigration Controls on Rail Traffic between Belgium and the United Kingdom using the Channel Fixed Link	Governments of UK & BE	2013	Policy Paper
10	Protocol between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the French Republic Concerning Frontier Controls and Policing, Cooperation in Criminal Justice, Public Safety and mutual Assistance Relating to the Channel Fixed Link, which entered into force 2 August 1993	Governments UK & FR	1991	Policy Paper
11	Antwoord op vragen van de leden Kröger en Ziengs over de douanecontrole Eurostar	Dutch Ministries of J&V and IeW	2018	Governmental documentation
12	Vragen van de leden Kröger (GroenLinks) en Ziengs (VVD) aan de minister van Infrastructuur en Waterstaat en de Staatssecretaris van Justitie en Veiligheid over de EuroStar trein naar London (ingezonden 5 februari 2020, nr. 2020Z02132)	Dutch Ministries of J&V and IeW	2020	Governmental documentation

13	New Eurostar treaties open up direct travel from Amsterdam to London	Department for Transport, Home Office, The Rt Hon Brandon Lewis MP, and The Rt Hon Grant Shapps MP	2020	Governmental documentation
14	Transport Secretary hails new horizons for rail travel across Europe	Home Office, Department for Transport, The Rt Hon Priti Patel MP, and The Rt Hon Grant Shapps MP	2020	Governmental documentation
15	Met de trein naar Londen, goed alternatief voor het vliegtuig?	NOS	2018	Media
16	Meer internationale treinkaartjes verkocht	NOS	2019	Media
17	Rechtstreekse trein naar Londen vanaf 30 april	NOS	2020	Media
18	Eurostar to launch London-Amsterdam direct service in April	The Guardian	2018	Media
19	Eurostar expands London-Amsterdam service to three trains a day	The Guardian	2019	Media
20	Eurostar to launch direct Amsterdam to London route in October	The Guardian	2020	Media

Table 21 – Overview of the coded sources

Appendix C – Sankey Diagrams

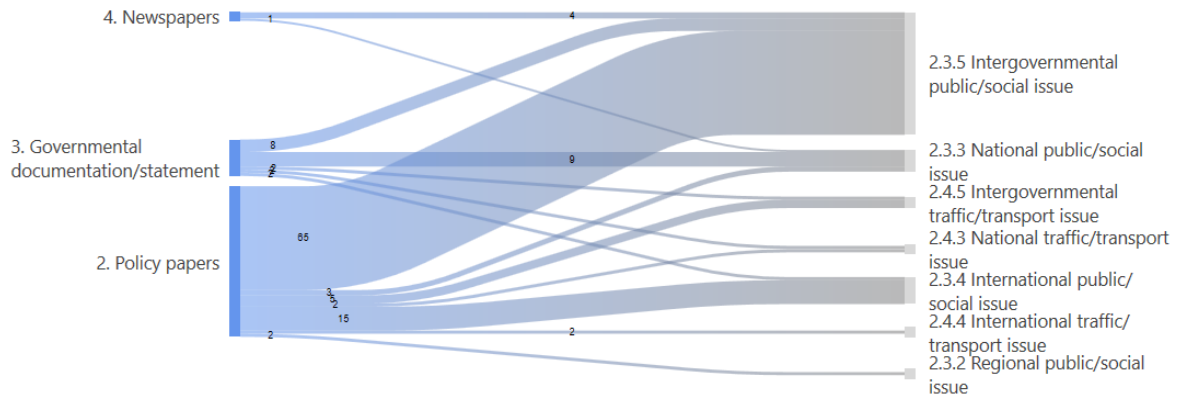


Diagram 1 - Sankey Diagram Policy Issues per document group

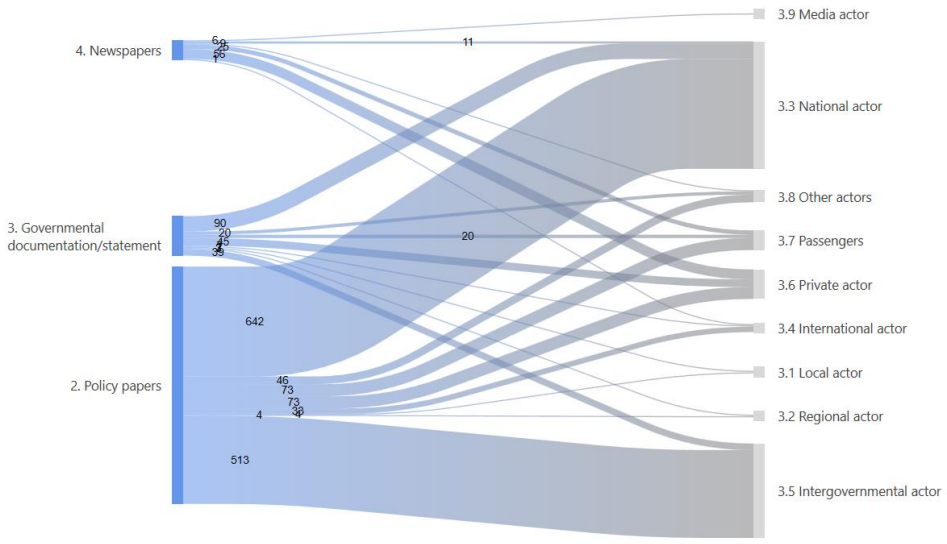


Diagram 2 - Sankey Diagram Policy Actors per document group

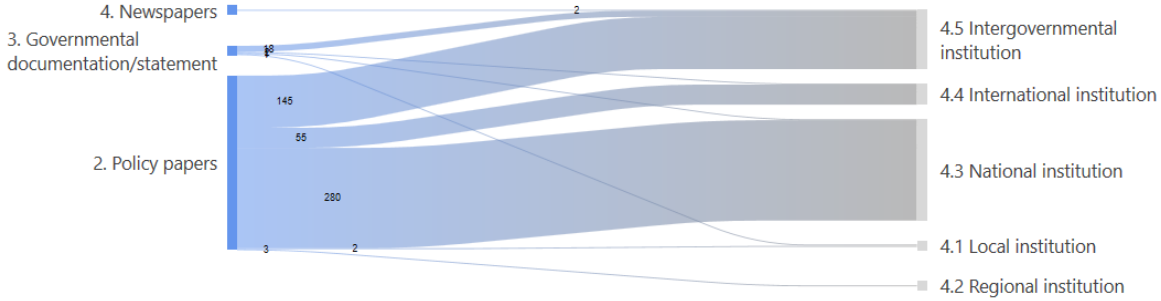


Diagram 3 - Sankey Diagram Policy Institutions per document group

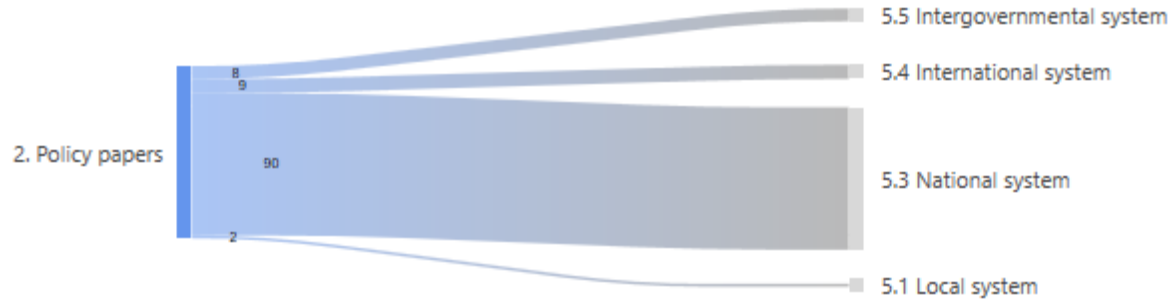


Diagram 4 - Sankey Diagram Policy Systems per document group