TOWARDS A METROPOLITAN GOVERNANCE IN THE SCHIPHOL AIRPORT REGION?

THE ISSUES AND OPPORTUNITIES FROM A STAKEHOLDER PERSPECTIVE

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DELFT UNIVERSITY OF TECHNOLOGY - FACULTY OF TECHNOLOGY, POLICY AND MANAGEMENT
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MASTER THESIS

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KEYWORDS

Governance, Schiphol, Airport Region, City Region, Amsterdam Metropolitan Area, Q-methodology, Policy Analysis, Stakeholder Perspectives, Issues, Opportunities

PREFACE

This thesis is my final work towards the achievement of a MSc title in Systems Engineering, Policy Analysis and Management at the department of Technology, Policy and Management of the Delft University of Technology.

The research in this report has been performed within the context of the Better Airport Regions-project, a project aimed on investigating the functioning of airport regions of international hub airports, with Amsterdam Airport Schiphol as main reference case. This research would not have been possible without the data the Better Airport Regions-project has supplied.

Moreover, in order for this research to take place the Schiphol Area Development Company provided me with a 5-month internship, which I am very grateful for as it was an excellent way to experience the governance complexity in the Schiphol airport region from within.

Finally, I also want to express my gratitude for:

- The interesting discussions I have had with my supervisors from the TU Delft: Ellen van Bueren, Maarten Kroesen and Hans de Bruijn. Your valuable feedback and critical comments have helped me to focus and significantly increase the quality of my argumentation.
- The always useful conversations with Michel van Wijk from SADC and the possibility he provided for me to participate in many of the Q-sort sessions. This was not only essential for my research, but also a very fun experience. I will never forget the many interesting personalities we have met and extreme statements that we have heard. We both started out as Q-sort novices, but ended the research as real Q-sort experts.
- My friends and family, who have always mentally supported me throughout the process.

For now, I can just express the hope that the reader will enjoy reading this thesis at least as much as I enjoyed writing it.

Delft, January 2014,

Jane Fain

EXECUTIVE SUMMARY

This research discusses the complex network of governance bodies in the Schiphol airport region. With the help of literature and 18 qualitative expert and stakeholder interviews this research identifies several issues about the way the governance is currently organised. Afterwards, the analysis of 41 stakeholder perspectives with the Q-methodology is used to identify opportunities for improvement of the current governance processes.

The main conclusions of this research are:

- The boundaries between Amsterdam Airport Schiphol and the metropolitan region of Amsterdam have been blurring and therefore increasingly more topics (economic development, noise & safety, land use, infrastructure & transport, sustainability) ask for an integral consideration on a regional level. Traditional forms of hierarchical government are not able to cope with these newly developed interdependencies.
- The eight existing long-term governance bodies that discuss airport-metropolitan interfaces (BRS, CROS, Alders Table, BFS, AAA, SRA, AMA, AEB) show some redundancy in the topics they discuss and in the parties that are involved.
- One could argue that this redundancy and fragmentation asks for upscaling and integration of several of the governance bodies. However, no right answer exists to the question on what scale governance should be organised. Only the stakeholders involved in or affected by current policy processes can indicate whether there is room for improvement as institutional change is always endogenous.
- Interviews with stakeholders and experts indicate that inefficiency due to fragmentation and redundancy is perceived by some as an issue. However, also four other issues are recognised: a lack of democratic principles, a lack of comprehensive decision-making on land-use themes, a need for hierarchy and a general feeling of tension.
- A further stakeholder analysis showed that there are five perspectives to perceive the Schiphol airport region and its governance: 'Aviation Growth', 'Sustainable Change', 'Economic Growth', 'Governance and Market', 'Government and Market'.
- Even though the five discourses have a different focus and priorities, none of them is completely juxtaposing the other and there is a large common understanding between respondents, especially on substantial issues.
- When it comes to governance, however, all five perspectives recognise different governance issues so it is too short-sighted to speak of a problematic governance environment in general.
- The issue of inefficiency is only partly recognised by the respondents and the effect of structural changes is questioned, as new bodies often still involve the same actors and agenda topics.
- Moreover, several structural changes are already planned in the upcoming years: the abolishment of the BFS, the merge of the CROS and the Alders Table into an Environmental Council and the replacement of the City Region of Amsterdam by a regional Transport Authority.
- Therefore, policy makers are not to focus on the quantity of governance arrangements, but on the quality of their outcomes.

Given the above conclusions, this research has made the following recommendations:

- Search for new methods of organising connectivity within the existing governance structures. The largest opportunity for organising connectivity mentioned by stakeholders in this research is in the alignment of all the local and regional visions on future land use in the Schiphol airport region.
- Ensure a sufficiently large scope in regional spatial visions to incorporate the increasingly large influence of Almere and Lelystad in the future. The Provinces of Noord-Holland and Flevoland can collaboratively take the lead in this.
- Enrich the regional agenda with more topics, as this research has quantified that when a multi-issue agenda is used, stakeholders are able to find a large common understanding.
- Involve sustainability-oriented stakeholders into policy processes, to ensure that the sustainability topic appears and stays on the regional agenda.
- Discuss not only the negative influences of Schiphol on its environment, but also the opportunities that the central role of Schiphol provides, such as to connect flows of water, energy and waste.
- Involve the ministries of Infrastructure and Environment and Economic Affairs into the regional governance bodies that can benefit from State involvement, such as the future Environmental Council.
- Involve more local companies to participate in regional discussions.
- Provide more information about why certain municipalities and citizens are involved in current collaborations to create more transparency and therewith accountability towards outsiders of the policy processes.
- Stop thinking from the old prejudices of Schiphol as pain in the neck-file, as this research has shown that the contradictions between stakeholder perspectives are not as large as sometimes suggested.
- Use the better insights into stakeholder perspectives from this research as a strategic policy tool to form coalitions and to frame discussions.
- Perform more research into:
  - How the current involvement of public bodies, private parties and citizens has come into place;
  - Which spatial processes are insufficiently connected;
  - How the growth of Lelystad Airport will influence systems in the Schiphol airport region;
  - How much consensus amongst stakeholders groups is needed for decisions to be adopted;
  - Shifting stakeholder perspectives after the upcoming governance changes.
- Organise a feedback meeting to share the Q-methodology results back into the stakeholder arena.

SUMMARY

Due to the increased spatial and economic scope of both city as airport, the number of interfaces of the contemporary airport and its metropolitan area has increased and the interfaces themselves have become rather complex. To deal with this decision-making complexity several governance arrangements have emerged in the Schiphol airport region at multiple scales. In these governance arrangements private and/or public parties collaboratively discuss topics such as land use, noise, economy etc. However, while the increment in the amount of airport-metropolitan interfaces and their complexity asks for integration in policy making processes, the current policy environment can rather be labelled as fragmented

Whether this lack of integration is a problem is impossible to answer without having a good overview of the perceptions of the stakeholders involved in or affected by these decision-making processes. Only then policy makers will know if they can actually speak of a governance problem, how much sense of urgency there is amongst stakeholders and in which direction to seek for possible solutions. Therefore, the main question that was answered in this report was:

What are the issues and stakeholder perspectives that can be distinguished regarding Schiphol-Amsterdam interface governance and how can this better stakeholder knowledge help to provide new insights on possible improvements of the current governance.

To answer this question, this research existed of three parts:

A. An intensive literature research on regionalisation, airport region development, governance, Schiphol and the Amsterdam Metropolitan Area;
B. Comparison of 18 interview transcripts with governance literature;
C. The quantification of 41 stakeholder perspectives using the Q-methodology.

Summary of literature research

This part of the report (Chapter 2-4) helped to answer the following three sub-questions:

1. How have metropolitan regions and airports developed over the years and which interface-complexity has this caused?
2. What are typical characteristics of the governance of similarly complex environments?
3. What governance arrangements are currently in place that concern both Schiphol as Amsterdam themes?

From literature it was concluded that while the expansion of the influence of both airports as cities is a global trend, Amsterdam and Schiphol can be seen as quite early adapters in this movement. Due to the expansion of the scope of both airport as metropolitan, increasingly more policy asks for an integral consideration on a higher level than solely airport or city. Five systems were identified that concern both airport as city and function on this higher level: Noise & Safety, Land Use, Infrastructure & Transport, Economic Development and Sustainability. While some of these interface themes are about positive reciprocal influences and distribution of benefits, others are more about negative reciprocal influences and the distribution of risks and costs. When it comes to deciding on this distribution active regional involvement is essential.

This report has identified that traditional forms of hierarchical government are not able to cope with these newly developed interdependencies. Slowly a more horizontal, network-oriented decision-making structure is rising, which in many cases has a better problem-solving ability. This departure

from traditional forms of government in contemporary societies is commonly referred to in social sciences as the term 'governance' and was defined in this report as:

☐ Interactions, collective decision-making, coordination and steering mechanisms;
☐ Performed by mutually dependent public and/or private actors;
☐ To ensure the provision of public goods and services and/or to solve collective, societal problems.

The literature research on governance arrangements showed that such arrangements break with the traditional, hierarchical division between public and private and are often better able to deal with the complexity of a network-like environment.

In the Schiphol and Amsterdam region also a large amount of such governance arrangements exists. The municipality of Amsterdam has already been collaborating with its surrounding municipalities from the 1970s on and has institutionalised this collaboration in the City Region of Amsterdam and the less formal body of the Amsterdam Metropolitan Area. On this level also economic issues are discussed in the Amsterdam Economic Board. While these three governance arrangements encompass the whole metropolitan area of Amsterdam, they also discuss many issues that are relevant for airport development. Moreover, five governance arrangements were discussed that are specifically focused on Amsterdam Airport Schiphol: the Regional Authorities governing Schiphol (BRS), the Schiphol Regional Consultative Committee (CROS), the Alders Table (Alderstafel), the Governmental Forum Schiphol (BFS) and the Amsterdam Airport Area. Next to these long-term regional collaborations, also several temporary collaborations are set up to come to regional visions, such as Plabeka and SMASH. Several redundancies were identified amongst these collaborative bodies, as many of these collaborations discuss the same of the five interface themes.

To deal with this often mentioned problem of governance fragmentation in the Schiphol airport region one could upscale or merge the current governance mechanisms to reach a more integrated regional governance system. However, even though upscaling governance arrangements has several advantages, there is also the risk that a too large governance arrangement becomes a victim of the complexity of its own bureaucratical structure

Various recent policy documents showed that the Schiphol/Amsterdam metropolitan region has noticed the many redundancies in governance and therefore plans to abolish the City Region of Amsterdam, the BFS, the CROS and the Alders Table in the near future. However, two new arrangements will replace them: the Environmental Council and the regional Transport Authority.

Whether these new collaborations will lead to a more efficient collaboration is yet unclear, however, it is a good sign that actors in the region see the need for continuous adaptation of the governance to changing times and needs

The literature research pointed out that no right answer exists to the question on what scale governance should be organised, so the best is if the governance structure is flexible enough to deal with needed changes in scale for different issues. But even if this flexibility can be reached, the governance approach still has several known weaknesses that might prevent it from reaching effective and efficient results. Therefore the next part of the research identified the mentioned weaknesses of the governance approach to decision-making and analysed whether these issues were also identified by stakeholders and experts in the Schiphol airport region.

Summary of comparison of interview transcripts with literature

This part of the report (Chapter 5) helped to answer the following sub-question:

> 4. What issues do stakeholders and experts perceive in the current Schiphol-Amsterdam interfaces and their governance and how does this compare to governance literature?

To answer this question, a literature research was done, which identified three commonly mentioned issues when it comes to the governance approach:

- **Inefficiency due to fragmentation and redundancy:** The involvement of many actors from governments, businesses and civil society is often associated with negative terms of administrative fuss, fragmentation, or meaningless compromises.
- **Lack of democratic principles:** By transferring social decision competence away from the formal, constrained government arenas towards the private sectors and civil society, the democratic principles of representation, legitimacy, and reliability are violated.
- **Need for hierarchy:** The ability to compromise and come to joint decisions in governance arrangements often only flourishes in the shadow of hierarchy. Therefore, a policy system that purely consists of governance bodies without any form of hierarchical institutions can never be effective.

These three issues were compared to 18 interview transcripts of interviews that were held with stakeholders and experts in the Schiphol airport region. In these interviews the respondents had been asked to freely speak about issues they perceive in the region. All three issues were recognised by several of the respondents.

From the interview transcripts also two additional region-specific governance issues were identified that currently prevent the policy-making system to be as effective and efficient as it could be:

- **A lack of comprehensive decision-making on land use themes;**
- **A general feeling of tension.**

In total, this led to an enumeration of five governance issues that were perceived by stakeholders and experts.

However, while this qualitative information gave an interesting overview of stakeholder views, it did not provide guidance on making conclusions on which issues are perceived to be the most important. Moreover, the 18 interviews only represented a small part of involved stakeholders in the region. Therefore, the final part of this research went more in-depth into a wider range of stakeholder perspectives.

Summary of the perspective analysis with the Q-methodology

The final part of this research (Chapter 6-9) answered the last three sub-questions:

> 5. Which perspectives on airport-metropolitan interfaces and their governance can be identified amongst the stakeholders with the help of the Q-methodology?
> 6. What conclusions can be drawn about the possibilities of Q-methodology as a policy analysis tool in similar cases: Can the results of the Q-methodology provide more information than just qualitative data?

7. Which recommendations can be made on opportunities for improvement of the current governance of the interfaces Amsterdam Airport Schiphol has with the metropolitan region it is part of?

To get a deeper insight on stakeholder views, the data of the Q-methodological study of the Better Airport Regions-project was used. This study involved 41 stakeholders who were asked about their opinion on 65 statements on the Schiphol airport region and its governance. Within this group of 41 respondents of public authorities, public companies and public/private collaborations, private companies, the aviation sector, several interest groups and several experts were represented, both insiders and outsiders of current decision-making processes. With the help of the Q-methodology five different ways of looking at decision-making in the Schiphol region were identified:

- Factor 1 (The Aviation Growth-Perspective) sees the airport as a growth engine of the metropolitan area. This old-boys network of dominant parties in the airport region does not perceive the current governance as problematic, but does see opportunities in the establishment of more formalised metropolitan governance bodies;
- Factor 2 (The Sustainable Change-Perspective) is very critical about current decision-making processes as they lack in transparency, do not involve enough parties and are not sufficiently focused on sustainability, environmental and noise-issues in the Schiphol region;
- Factor 3 (The Economic Growth-Perspective) also pursues the economic development of the Schiphol region, but believes that a strong national Government should provide strict rules for noise and land use policies in order to protect the inhabitants from the often profit-driven municipalities;
- Factor 4 (The Governance and Market-Perspective) does not perceive many issues in the way governance is currently organised. This perspective is very focused on regional collaboration and the involvement of sufficient parties into decision-making processes. The national Government should provide the framework, but public-private collaborations in the region will do the rest;
- Factor 5 (The Government and Market-Perspective) perceives that there are currently too much regional collaborations; it prefers decision-making by the national Government, provinces and municipalities. However, private parties should also be involved in regional decisions and the market should receive more freedom and be less regulated than is currently the case.

The application of the Q-methodology and the analysis of the five stakeholder perspectives helped to put the governance issues into perspective. While in a qualitative interview respondents can just enumerate a large amount of issues, in a Q-sort they are forced to prioritise these and only then comes to the fore what they truly find important.

Even though the five different discourses have a different focus and diverging priorities, an important notion is that the analysis also showed that there is also a large common understanding between the perspectives in this research. All five perspectives for example acknowledge the importance of Schiphol and its network for the regional economy. Moreover, all five perspectives acknowledge the importance of discussing land use, infrastructure & transport and economic development on a regional level. This common base between the perspectives is often overlooked in policy reports that just focus on contradictions.

SUMMARY OF CONCLUSION AND RECOMMENDATIONS

By combining the three analyses that were described above, this research was able to come to the following conclusions and recommendations for the opportunities of governance improvements in the Schiphol airport region.

Notwithstanding the common base between the respondents in this research, when the five perspectives were projected onto the five governance issues it became evident that not each perspective sees the current governance environment in the Schiphol airport region as problematic and if they do, respondents from each perspective blame different issues for that. Therefore, it is too short-sighted to speak of a problematic governance environment, as the extent of the problem perception and the exact issues that are perceived differ strongly depending on the chosen perspective. Moreover, the fact that the governance arrangements in the Schiphol airport region have been able to come to several important decisions in the last few years shows that the current governance is already able to lead to implementable policy results and long-term strategies for the region.

Still, several opportunities for improvement of the current governance were found, based on the better stakeholder understanding. This report concluded that these opportunities are not to be found in rigorous structural changes for three reasons:

- The issue of inefficiency due to fragmentation and redundancy is mainly recognised by respondents that are generally sceptic about regional collaboration; it is questionable whether any structural changes (e.g. abolition/merger of governance bodies, introduction of overarching governance bodies etc.) would be able to improve their negative appreciation of the governance.
- Several structural governance changes are already planned; this year the region decided on the abolishment of the BFS, the merge of the CROS and the Alders Table into an Environmental Council and the replacement of the City Region of Amsterdam by a regional Transport Authority. Additional structural changes that were discussed in this research with the stakeholders, such as the introduction of a metropolitan board or a regional development company showed mixed results amongst the five perspectives. Therefore, it is not expected that such changes can be implemented on a short term.
- The structural governance changes that have been made in the region in recent years show that new collaborative bodies often still involve the same parties and discuss the same topics as the old collaborations they replace and therewith do not have a large influence on policy outcomes.

Therefore, it was stated that a certain level of fragmentation and redundancy is inherent to governance and should be accepted. Instead of focusing on the quantity of governance arrangements, the opportunities for governance improvements in the Schiphol airport region are rather in incremental substantive change to improve the perceived quality of policy outcomes. To achieve this it is important to constantly look for <u>new methods of organising connectivity</u>, <u>enrichment of the agenda</u> and the involvement of <u>a more diverse range of stakeholders</u> with innovative ideas into policy-making processes. This conclusion has led to the following recommendations for policy makers in the Schiphol airport region:

- The largest opportunity for organising connectivity is in the alignment of all the local and regional visions on future land use in the Schiphol airport region. Many stakeholders perceive that a comprehensive regional strategy on land use is currently missing. It is essential that

regional spatial strategies have a sufficiently large scope and consider the increasingly large influence that the municipalities of Almere and Lelystad will have on the Schiphol-Amsterdam region in the future.

- The largest opportunity for enriching the regional agenda is in giving sustainability topics a more prominent role in discussions. Even though most stakeholders believe that sustainability is important, other issues usually still receive the priority and therewith the opportunities for using Schiphol's central location to connect flows of water, energy and waste are underexposed in the current governance context. By involving parties into the new Environmental Council that load high on the Sustainable Change-perspective (e.g. Society for Nature and Environment, Delta Project Development or local farmers), sustainability will not make place as easily for other regional topics as it does now.
- Next to the involvement of more sustainability-oriented parties into regional collaborations, opportunities for improving the stakeholder involvement in governance bodies are in:
  o A more active formalised role of both the ministries of I&E and Economic Affairs in the regional governance bodies that can benefit from a more active State participation, such as the future Environmental Council;
  o Inviting more local companies to participate in regional discussions, as most of the governance bodies in this research are too much focused on public parties;
  o Providing a better overview of why certain municipalities and citizens are involved in current collaborations, to create more transparency and accountability towards outsiders of the policy processes.

The final recommendation of this research was that even though the governance issues in the Schiphol region are not as large as sometimes portrayed in other reports, amongst some actors still an image of tension, disagreement and standstill exists. It is up to policy makers in the airport region to get rid of the many misconceptions by stopping to think from these old prejudices themselves. The rich overview of stakeholder perspectives provided in this research can be a starting point for this.

Finally, this report has left some questions marks that were not the focus of this research, but would be a good baseline for further studies:

- A thorough analysis of the eight existing regional collaborations and the involvement of public bodies, private parties and citizens in these.
- Mapping the large amount of local, regional and national spatial visions for the region to give more insight into which spatial policy processes are insufficiently connected.
- A research into the influence of the planned growth of Lelystad Airport on the functioning of systems in the Schiphol airport region.
- The mechanism between the amount of consensus needed between different perspectives for a decision to be adopted.
- Feedback of the Q-methodology results back into the stakeholder arena in order to:
  o Obtain an even richer view of the perspectives and the underlying arguments;
  o Confirm whether stakeholders recognise the perspectives that they subscribed to;
  o Better explain the differences between different stakeholders from the same organisation;
  o Lead to better understanding and more agreement in the stakeholder arena.
- A future similar Q-methodological research to map shifts in perspectives and to analyse what kind of impact the upcoming governance changes have had on stakeholder perspectives.

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LIST OF ABBREVIATIONS

AAS = Amsterdam Airport Schiphol
AMA = Amsterdam Metropolitan Area
BAR = Better Airport Regions
BFS = Bestuursforum Schiphol
BRS = Bestuurlijke Regiegroep Schiphol
CROL = Commissie Ruimtelijke Ontwikkeling Luchthavens
CROS = Commissie Regionaal Overleg luchthaven Schiphol
LVNL = Luchtverkeersleiding Nederland
MRA = Metropoolregio Amsterdam
RLI = Raad voor de Leefomgeving en Infrastructuur
ORS = Omgevingsraad Schiphol
Plabeka = Platform Bedrijven en Kantoren
ROA = Regionaal Orgaan Amsterdam
RRAAM = Rijk- en Regioprogramma Amsterdam Almere Markermeer
SADC = Schiphol Area Development Company
SMASH = Structuurvisie Mainport Amsterdam Schiphol Haarlemmermeer
SRA = Stadsregio Amsterdam
VGP = Vereniging Gezamenlijke Platforms

IMPORTANT TRANSLATIONS

Air Traffic Control Netherlands = Luchtverkeersleiding Nederland
Alders Table = Alderstafel
Amsterdam Metropolitan Area = Metropoolregio Amsterdam
City Region Amsterdam = Stadsregio Amsterdam
Confederation of Netherlands Industry and Employers = VNO-NCW
Council for the Environment and Infrastructure = Raad voor de Leefomgeving en Infrastructuur
Committee for Spatial Development of Airports = Commissie Ruimtelijke Ontwikkeling Luchthavens
Environmental Council = Omgevingsraad Schiphol
Fourth Report on Spatial Planning = Vierde nota ruimtelijke ordening
Fifth Report on Spatial Planning = Vijfde nota ruimtelijke ordening
Governmental Forum Schiphol = Bestuursforum Schiphol
Informal Consultation Amsterdam Agglomeration = Informeel Overleg Agglomeratie Amsterdam
Joint Platforms Association = Vereniging Gezamenlijke Platforms
Ministry of Infrastructure & Environment = Ministerie van Infrastructuur en Milieu
Ministry of Economic Affairs = Ministerie van Economische Zaken
National Policy Strategy for Infrastructure and Spatial Planning = Structuurvisie Infrastructuur en Ruimte
National Spatial Strategy = Nota Ruimte
North Wing= Noordvleugel
Platform Businesses and Offices = Platform Bedrijven en Kantoren
Regional Authorities governing Schiphol = Bestuurlijke Regiegroep Schiphol
Regional Body Amsterdam = Regionaal Orgaan Amsterdam
Schiphol Regional Consultative Committee = Commissie Regional Overleg Schiphol
Schiphol Quality of Life Foundation = Stichting Leefomgeving Schiphol
Society for Nature and Environment = Stichting Natuur & Milieu
Water Board of Rijnland = Hoogheemraadschap Rijnland

1. INTRODUCTION

This chapter provides a short introduction into Amsterdam Airport Schiphol, the Amsterdam Metropolitan Area and the complexity of the interface-governance between the two. This leads to a research design that will provide more clarity about the issues and perspectives of the stakeholders involved in or affected by decision-making about the airport region.

Since the late 1970s, there have been simultaneous tendencies of internationalisation and decentralisation which has created a global economy. This economy is built on cities, increasingly competing in attracting and containing international companies and activities. Our understanding of cities and places has therefore changed and cities are no longer seen as bounded, spatially fixed sites encircled by a city wall. The current role of cities depends on flows of capital, labour and social connections that go far beyond the city borders and often even beyond the country borders (Castells, 1996; Hesse, 2013; Salet & Thornley, 2007; Scott, 2001; Warf & Storper, 2000).

The local government scale is therefore increasingly viewed as too small to be economically viable in the global economy and the 'city' in its old-fashioned, narrow definition is inadequate as a framework for contemporary planning and policy (Janssen-Jansen & Hutton, 2011). More and more policy issues cross local borders and therefore require to be managed by planning at the city-regional or metropolitan level (Levelt & Janssen-Jansen, 2013). Important aspects that are valued in metropolitan areas are economic strength, a good investment climate, quality of life and excellent transport connections.

Functioning as gateways to these metropolitan areas, airports play a crucial role in keeping metropolitan areas accessible and therefore competitive. Airports have thus become essential transport nodes facilitating travel, trade and tourism. Gradually airports are recognised for not only being critical components of efficient city infrastructure, but also as key assets for cities and regions as economic generators and catalysts of investment (Stevens, Baker, & Freestone, 2010).

This thesis focuses on the case of Amsterdam Airport Schiphol (AAS), the main international airport in the Netherlands, and the metropolitan area of Amsterdam that the airport is connected to. However, this research does not look at Amsterdam Airport Schiphol strict from the perspective of its function as a transport hub. This perspective does not suffice anymore due to the increased number of roles airports are fulfilling and the intensified embeddedness of airports in their environment. The influence of the modern airport reaches much further than the airport fence. The Schiphol area is a landscape of offices, hotels, warehouses, shopping complexes and logistics facilities, an excellent example of the AirportCity concept (Güller, 2003).

The effects of AAS on its surroundings are very large, both in negative aspects like noise nuisance and spatial restrictions, as in positive aspects such as international competitiveness and the creation of jobs. The airport creates over 60,000 direct jobs and even more indirect jobs in the region, mainly in trade, logistics and general business services. Moreover, the AirportCity concept has attracted several European headquarters and distribution centres in the region (de Jong, Suau-Sanchez, & Droß, 2008). The exact effects of the airport on its surroundings are, however, difficult to measure (Hesse, 2013), especially since the negative impacts are quite concentrated in its immediate surroundings, while the benefits are more diffuse (Freestone & Baker, 2011).

Without a well-connected airport, the city loses its international competitiveness. Therewith airports are increasingly influential in shaping urban form and structure. On the other hand the growth of cities has also impacted the scale and operations of airports and their ability to transfer from isolated landing fields to commercially oriented airport cities (Güller, 2003).

One can therefore speak of a reciprocal relationship between the metropolitan area and its airport. The perception of the past in which the airport and the city were two separate entities with some flows between them (Figure 1) does not suffice to solve the present-day complexities. Due to the increased spatial and economic scope, the number of interfaces of the contemporary airport and its metropolitan area has increased and the interfaces themselves have become rather complex, driven by the potentially conflicting views of operators, users, neighbours and governments at local, regional and national levels (Hesse, 2013). A schematic overview of the new reality of the metropolitan area, the airport and their interfaces is also represented in Figure 1. The increment in this interface complexity has an influence on policy-making processes on airports in metropolitan areas.

Past

Present
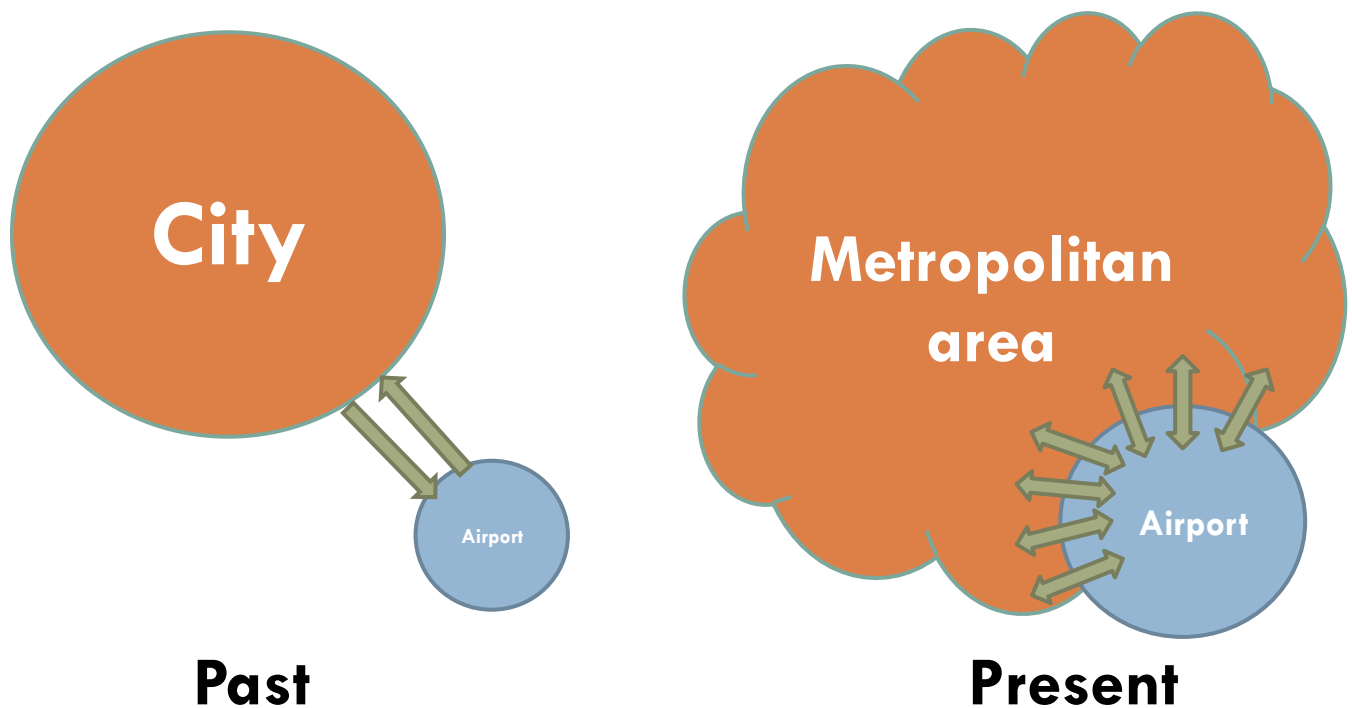
FIGURE 1: THE CHANGED NATURE OF THE RELATIONSHIP BETWEEN CITIES AND AIRPORTS

Policy-makers have to capture the opportunities that the airport-metropolitan reciprocity offers, while trying to distribute the costs and benefits of airport proximity evenly over the large diversity of stakeholders. In reality, this proves to be a difficult task.

To deal with the complexity of decision-making in the Schiphol airport region, several governance arrangements have emerged at multiple scales. In these governance bodies private and/or public parties collaboratively discuss topics such as land development, infrastructure, transport, the economic development of the region, sustainability, noise and safety issues. Both metropolitan as airport-related topics are fragmented over these different arrangements, which is schematically represented in Figure 2. Even though the exact amount of vertical and horizontal layers in the representation of the governance of the interfaces between airport and metropolitan region in Figure 2 should not be taken precisely and only a small amount of interfaces is represented, the model is useful to explain two problems that are sometimes expressed about the way the governance is currently organised.

The first problem that one could have regarding the current organisation of decision-making on airport-metropolitan interfaces has been discussed in policy literature for over 40 years, pioneered by Vincent Ostrom in the 1960s (V. Ostrom, Tiebout, & Warren, 1961). The problem entails that there are currently too many horizontal (green) layers, meaning that different substantive themes are not integrated well enough. Proponents of this view do not understand why there are for example some governance arrangements discussing land use and others are discussing infrastructure and transport, while these themes could also be discussed at once. Following this argumentation, one will speak of a crazy-quilt pattern of governance arrangements and one will see the current way of decision-making as an organised chaos. The large amount of governance arrangements is perceived by this view as a duplication of functions and overlapping jurisdictions, which leads to too many governments and not enough government (V. Ostrom et al., 1961).

Land use	Governance arrangement A / Governance arrangement B
Infrastructure & Transport	Governance arrangement C
Economic development	Governance arrangement D / Governance arrangement E / Governance arrangement F
Sustainability	Governance arrangement G
Noise & Safety	Governance arrangement H / Governance arrangement I
Etc.	Governance arrangements J...Z
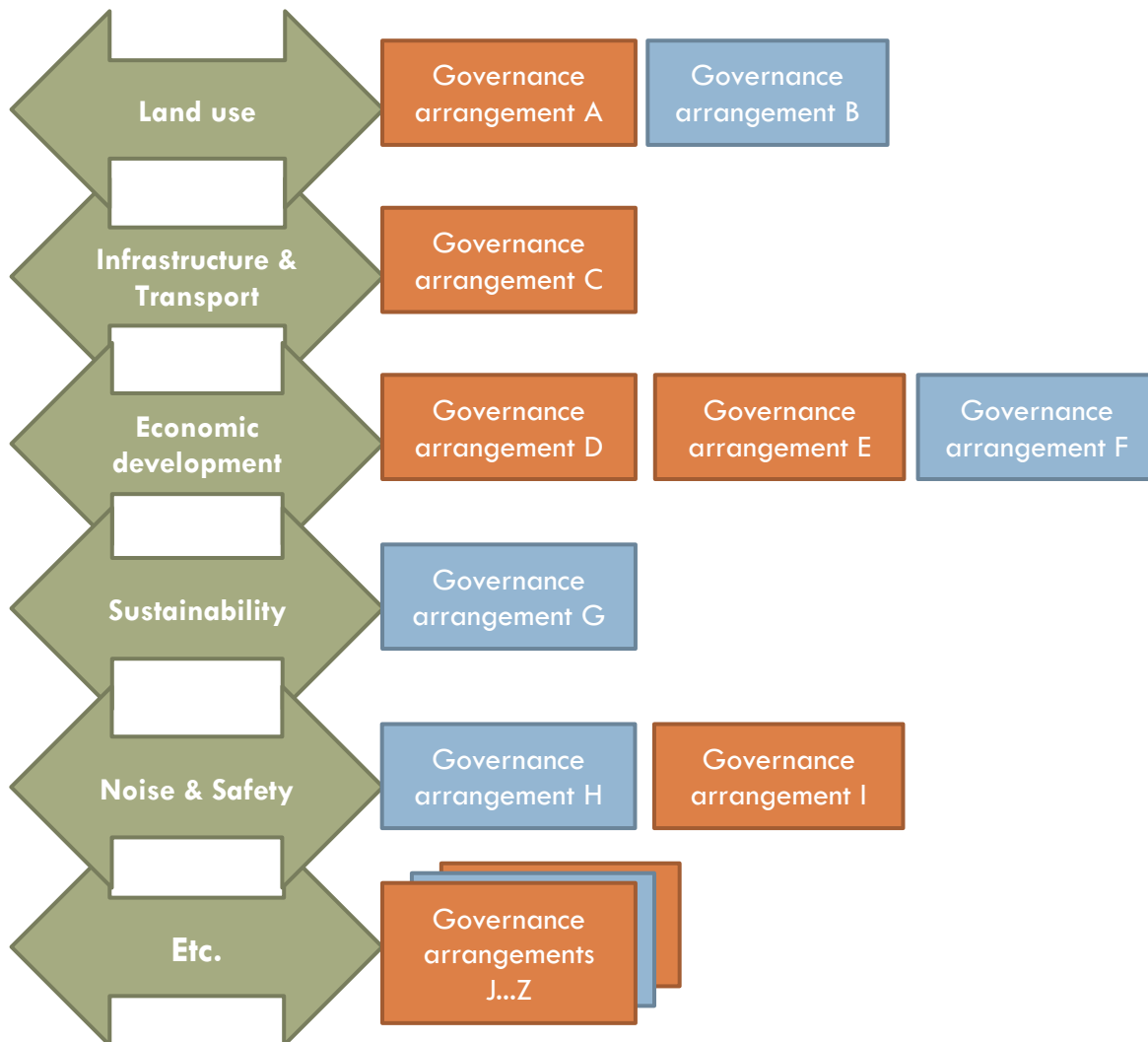
FIGURE 2: SCHEMATIC REPRESENTATION OF SEGMENTED GOVERNANCE ARRANGEMENTS

The second problem that is sometimes expressed about the current structure is that there are too many vertical (orange/blue) layers. Because of this, the same topics are discussed in multiple policy arenas. For example, as well Schiphol as the municipalities of Haarlemmermeer and of Amsterdam decide on economic developments. However, the three economies cannot be seen as separate entities, as they

are largely interrelated. Proponents of this view, such as Appold and Baker therefore state that the existing, segregated policy and planning institutions are inadequate, as air travel is fundamentally multi-modal and tied to land use decisions (Appold & Baker, 2010). In his other work in collaboration with Freestone, Baker specifically treats the integration of airports in their wider metropolitan regions and again concludes that in most regions current governance arrangements do not capture the full potential of the airport-city reciprocity. Freestone and Baker (2011) state that planners and policy makers still overlook the airport region as a planning entity, as they are not accustomed yet to this new reality. Therefore a coherent vision of metropolitan and regional development within which aviation interests are realistically accommodated is missing. Freestone and Baker believe that only if this is in place, a holistic perspective might arise in which the airport can shift from the current role as a dividing force to a more uniting role.

Several authors have already described both these types of fragmentation in the Schiphol policy field (Moes, in t Veld, & Teisman, 2009; van Boxtel & Huys, 2005; Vriesman, van Twist, & van de Riet, 2009 etc.). Both types of perceived fragmentation could potentially be solved by re-organising the governance arrangements into larger units, to gather up the various functions of government (V. Ostrom et al., 1961). However, while this approach does fit in with the current political tendencies, whether it would actually have the wanted effect is yet unclear, as there are also strong arguments against it. The main argument that refutes the merging and upscaling of current local governance arrangements is that the challenges of a complex network environment are best dealt with by governing at multiple scales and that generation of redundancy is actually a good thing (V. Ostrom et al., 1961). The latest advice report on governance in the Schiphol area by the Council for the Environment and Infrastructure (2013) seems to take on this latter argument and proposes an acceptance of the complexity of the current governance structure.

Frankly, both the proponents of reducing complexity as the accepters of this complexity have valid arguments that have backing in different movements in literature. Therefore, it is hard to state upfront whether or not there are issues with the relatively complex way the governance is currently organised in the Schiphol-Amsterdam region or how decision-making on the airport-metropolitan interfaces should be performed in the future.

1.1 Problem Statement

The increment in the amount of airport-metropolitan interfaces and their complexity asks for integration in policy making processes. However, this is often not yet reflected in reality, as the policy environment is currently rather to be labelled as fragmented than as to be integrated. Whether the current complexity and fragmentation actually forms a problem is, however, difficult to conclude without further research. The perspective of looking at the airport area and the metropolitan region as being integrated is relatively new and therefore current literature does not provide much guidance on objective criteria to assess whether the governance of airport-metropolitan interfaces is good enough to capture the full potential of the airport-metropolitan reciprocity. Moreover, one can question whether such criteria exist and if the quality of the governance is not solely in the eye of the beholder. After all, the current governance carries the bias of previous interaction, views and power relations (Klijn & Koppenjan, 2006). An important driver for change in multi-actor systems is thus endogenous, stemming from the actors' desire to control and modify their environment in certain directions. Even though the network level can set the conditions for actions of the individual actors, the actors that form the network can shape and change the network of which they are part (Hermans & Cunningham, 2013).

In other words, even if there were some objective criteria and these would suggest that good governance is in place, if the stakeholders that are involved in or affected by this decision-making do not perceive it this way, one cannot speak of successful governance arrangements. This principle also works the other way around. Quite often, a group of experts gathers in a policy advice committee to give recommendations on the improvement of a policy situation. In recent years such advice reports on the governance of Schiphol were for example published by the Committee for Spatial Development of Airports (2009) and the Council for the Environment and Infrastructure (2013). However, in some cases the advice these reports present are too far away from the general perception in the stakeholder arena. Even though the results of such reports can still be valid and interesting, the added practical value can be limited if the problem definition such a committee addresses in the report comes from a select expert consultation and does not reflect the problem perception of the majority of the stakeholders. Especially if the recommendations include the rise of a more bottom-up approach of governance, knowledge about the perceptions of stakeholders at this 'bottom' is essential. As such knowledge is currently missing about the governance of the Schiphol airport region, it is unclear whether we can actually speak of a governance problem, how much sense of urgency there is amongst stakeholders and in which direction to seek for possible solutions.

1.2 Research Objective

This research seeks to identify whether stakeholders perceive issues in the current governance of the interfaces between Schiphol Airport and the Metropolitan region of Amsterdam and if so, what knowledge this provides about possible future changes in this governance.

Research Context
The research in this report will be performed within the context of the *Better Airport Regions (BAR)-Project*; a project aimed on investigating the functioning of airport regions of international hub airports with Schiphol Airport as main reference case. The goal of the BAR-Project is to deliver guidelines for decision-makers in policy, industry, and academia; to provide a better conceptual model for the integration of airports and cities; and to produce transformation scenarios to enable a broad discussion on the future of airport regions.
The project consortium consists of: TU Delft, UvA, ETH Zurich, TU München, Schiphol Airport, Zurich Airport, Municipality of Haarlemmermeer, Kanton Zurich, Municipality of Zurich, Municipality of Kloten, Schiphol Area Development Company and the Schiphol Group. The funds for the BAR-Project come mainly from the subsidy by the NWO programme 'Urban Regions in the Delta'.

Several advice reports have already treated decision-making around Amsterdam Airport Schiphol, but by taking a wider scope of Schiphol within the Amsterdam Metropolitan Area, this analysis can lead to results that fit in better with the current reality of airport cities and metropolitan competitiveness. Moreover, this research aims to provide new insights by not only using governance literature and policy experts as a source, but by also involving a large diversity of other stakeholders into the analysis.

When identifying issues on how decisions are made, it is natural that not only policy issues come to light, but also issues on the topics that decisions are made on. For example, when discussing the functioning of a governance arrangement that decides on the amount of allowed noise emissions, it

will come as no surprise that the interviewee will probably also express his opinion on noise issues, instead of merely focusing on the governance of this noise nuisance. Therefore, this research identifies both substantive as governance issues in the airport-metropolitan interfaces, as these can almost not be seen separately. However, it is not the aim of this research to come up with solutions on the substantive issues, merely to advice in which manner and with involvement of which parties these problems could be resolved.

A comparable in-depth analysis of stakeholder perspectives on Schiphol policy issues has been previously performed by van Eeten (1999), who performed a detailed analysis of both public and private stakeholder arguments by using the Q-methodology. Yet, the goal of this research was to capture the different views on the expansion of Schiphol and the environmental consequences of this. Even though this also entails several governance issues, governance was not the main focus of this analysis. Moreover, the policy environment has changed greatly since 2001. Twelve years ago the policy framework of Schiphol airport region was different as the government had not yet presented its National Policy Strategy for Infrastructure and Spatial Planning (2012) and not even the National Spatial Strategy (2004). The Amsterdam Metropolitan Area was still called the North Wing and was less influential than it is now and many of the currently important governance arrangements did not even exist yet.

Even though the environment in which van Eeten performed his research was quite different, the Q-method can be an interesting way to capture the subjectivities of stakeholders and discover correlations between the views of different actors (Kroesen & Bröer, 2009). Therefore the BAR-Project team decided in the beginning of 2013 that the use of Q-methodology could possibly also provide interesting new insights in the Schiphol-case.

By the means of Q-methodology the perceptions of groups of actors about the relation among problems, solutions, and other elements that they frequently refer to in policy discussions are clarified. The Q-method can structure and explicate arguments and reasoning, which can help to identify the assumptions and claims that are critical in shaping different positions in a policy discourse. This can work towards the identification of areas of dispute and therewith a possible formulation or reformulation of the problem (Hermans & Cunningham, 2013). Moreover, next to providing policy makers with more information about the different perspectives, their differences and similarities, the found perspectives can also be fed back to the stakeholders and provide a starting point for a stakeholder dialogue.

On the base of this theory it seems like the application of the Q-methodology to the governance of the airport-metropolitan interfaces could provide a better picture of the actor network. However, not all the literature is that positive about the Q-method. For instance Weimer (1999) doubts whether the method can actually provide surprising insights beyond the "qualitative picture that would emerge directly from interviews" (Weimer, 1999, p. 429).

Therefore the suspicion exists that performing a stakeholder analysis following the Q-methodology could possibly be a helpful tool for policy makers in the airport region, but this suspicion by the BAR-Project team will be tested in this research.

The above delineated problem statement and elaboration on the Q-methodology lead to the following research objective:

> **Research Objective**
> The goal of the proposed research is to:
> 1. Analyse current policy and substantive issues in the interfaces between Amsterdam Airport Schiphol and the metropolitan region of Amsterdam.
> 2. Analyse stakeholder perspectives following the Q-methodology in order to:
> - Expose the present arguments and views on governance and substantive topics.
> - Expose (dis)agreement topics, coalitions and opposition.
> - Find out whether this understanding can support future decision making processes on governance changes in the Schiphol airport region.
> - Explore whether Q-methodology is an appropriate policy analysis tool for similar cases.
> 3. Conclude whether the knowledge about issues and perspectives can provide new insights on opportunities for improvements of the current governance situation.

The results of this research are expected to contribute both in a scientific as in a social way. The final advice can assist policy makers in reformulating the problem from a stakeholder perspective, structuring the discussion and herewith contribute towards the (re)design of governance arrangements of airport-metropolitan interfaces. Moreover, the results can add to the understanding about the capability of application of the Q-methodology in similar cases.

1.3 Research Questions

The problem statement and research objective explained in the previous paragraphs lead to the following main research question for this thesis:

> **Main Research Question:**
> What are the issues and stakeholder perspectives that can be distinguished regarding Schiphol-Amsterdam interface governance and how can this better stakeholder knowledge help to provide new insights on opportunities for improvements of the current governance?

Important sub-questions that need to be answered in order to be able to draw conclusions about this main research question are:

☐ 1. How have metropolitan regions and airports developed over the years and which interface-complexity has this caused?

☐ 2. What are typical characteristics of the governance of similarly complex environments?

☐ 3. What governance arrangements are currently in place that concern both Schiphol as Amsterdam themes?

☐ 4. What issues do stakeholders and experts perceive in the current Schiphol-Amsterdam interfaces and their governance and how does this compare to governance literature?

☐ 5. Which perspectives on airport-metropolitan interfaces and their governance can be identified amongst the stakeholders with the help of the Q-methodology?

☐ 6. What conclusions can be drawn about the possibilities of Q-methodology as a policy analysis tool in similar cases: Can the results of the Q-methodology provide more information than just qualitative data?

☐ 7. Which recommendations can be made on opportunities for improvement of the current governance of the interfaces Amsterdam Airport Schiphol has with the metropolitan region it is part of?

1.4 Research Approach

To support this Master thesis, the governance research group of the BAR-Project has provided 18 transcripts from interviews with stakeholders and the possibility to participate in the Q-methodological interviews they were already planning to perform. Moreover the Schiphol Area Development Company has provided some resources in the form of a 5-month internship so that this research can take place.

1.4.1 Research methods and data collection

To answer the sub questions and subsequently the main research question, the following research methods will be used:

Desk research (sub-questions 1, 2, 3)

Firstly, an extensive literature review is done on the development of cities into metropolitan regions, the development of airports into airport cities and thereafter the growing reciprocity between these metropolitan regions and their airports. This literature is found through a systematic literature review. Important key words that are used in search engines are amongst others: city region, metropolitan region, airport city, airport region and aerotropolis.

Some essential works by van Wijk, Baker, Freestone, Güller and Janssen-Jansen are identified, after which the snowballing method is applied. Whenever a relevant article is found on the topic the reference list of that study is scanned to identify other interesting sources, until an extensive amount of articles is found for the scope of this research.

The same method is applied for a literature review on the theory of governance and specifically the governance of complex systems on several levels and scales. For this theme important key words are: governance, complex systems, multi-level, multi-actor, fragmentation, scale. The work of Ostrom, Teisman, Klijn, Koppenjan and Termeer was a starting point for the discovery of more relevant literature.

The focus of the literature research is on relatively recent articles published in the period from 2003 to 2013. However, if important articles were found which are published before 2003, they were not necessarily excluded. Especially the topic of governance has been much discussed in the last fifty years, so for this theme also several relatively old sources will be used.

Next to the use of a diverse range of key words also several search engines (Scopus, Web of Knowledge, JSTOR and Google Scholar) were used to ensure an overview of relevant articles that is as complete as possible.

Afterwards, the focus of the desk research was on the mapping and the analysis of the current governance arrangements and their institutional context. This is done by an analysis of policy documents and websites of these governance arrangements.

Interview transcripts (sub-question 4)

In order to get a better view on stakeholder views on the way decision-making is currently organised, interview transcripts from 18 interviews are used to extract issues. These interviews have been performed by the researchers of the BAR-Project from October 2012 to January 2013.

Q-sort sessions and factor interpretation (sub-questions 5, 6)

The 18 pre-interviews mentioned earlier were used by the BAR-Project to formulate statements for 41 Q-sort sessions with different public and private stakeholders. Next to the opportunity to join several of these Q-sort sessions, the BAR researchers have provided all qualitative and quantitative data from the 41 Q-sort sessions for the research in this report to take place.

In order to analyse the data from these sessions, the theory of Watts and Stenner (2012) and Steven Brown on doing Q-methodological research was leading.

After all the Q-sort sessions were performed and all the data was made available, factors were identified with the help of PQ method software. These factors were interpreted with the help of the knowledge obtained and extra interviews with TU Delft researchers and other experts. There was a possibility that not every factor could be interpreted in a logical way, but this would be an interesting result by itself.

1.4.2 Research design

The following research design (Figure 3) visualises the research steps followed to answer the main research question.
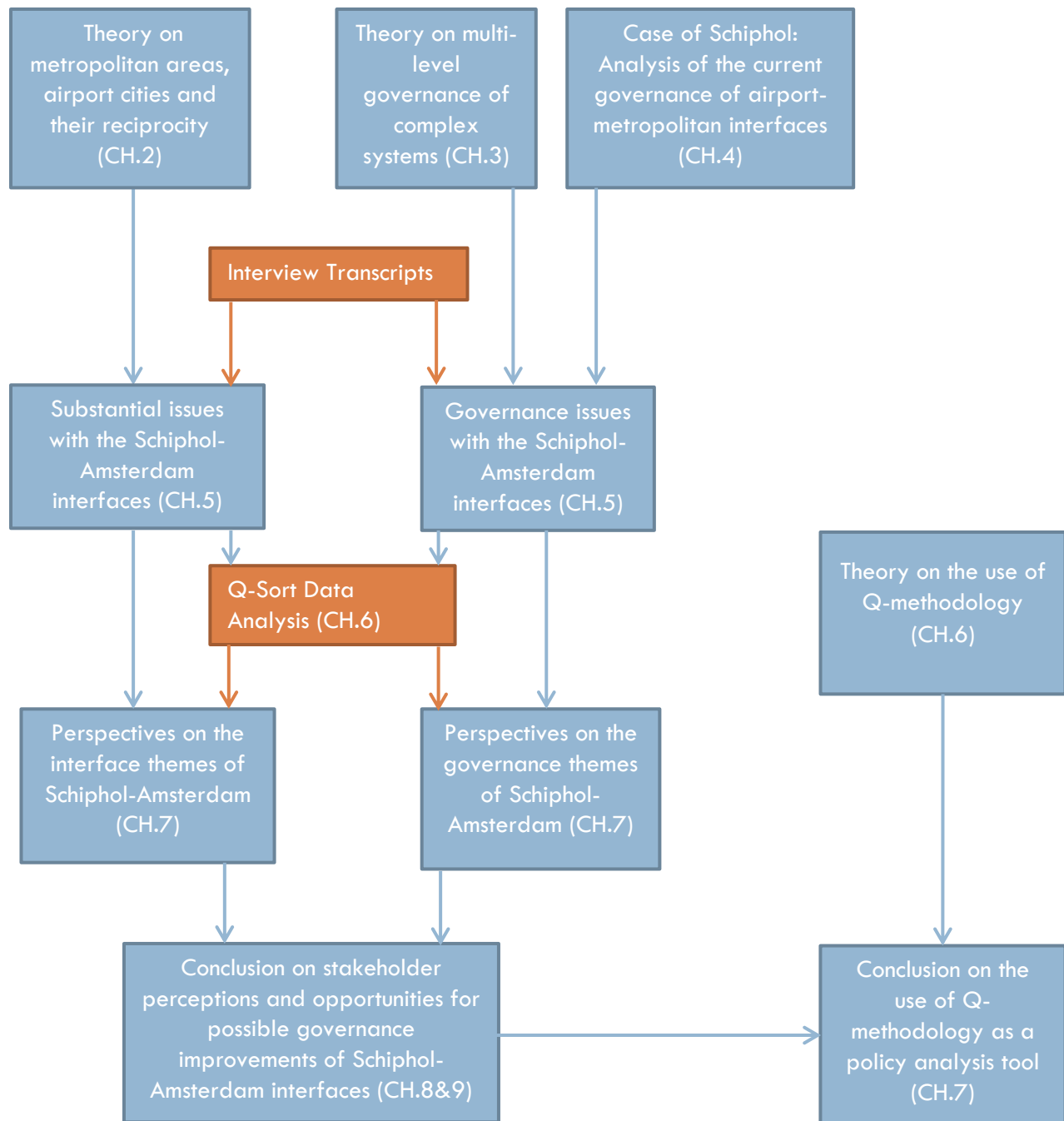
FIGURE 3: RESEARCH FLOW DIAGRAM

2 SETTING THE SCENE ON AIRPORT-METROPOLITAN INTERFACES

This chapter provides theoretical background on how metropolitan regions and airports have developed over the years and which interface complexity this has caused. Paragraph 2.1 first describes the transition from city to metropolitan area in general and later focuses on the case of Amsterdam. Paragraph 2.2 treats the transition from airport to airport region, firstly in general and later for the case of Schiphol. Paragraph 2.3 then combines the two transitions and portrays the interface complexities that are in place.

2.1 Transition from City to Metropolitan Region

As was already briefly described in the introduction, large cities are increasingly broadening their horizons and working on a more regional scale. This paragraph will describe this transition in more detail. However, before a theoretical framework will be sketched, a definition issue needs to be resolved. It can be hard to distinguish the difference between the city region and the metropolitan region or metropolitan area. Some authors see the concepts as equivalents, while others define them differently. All concepts have in common that they stand for urban areas lacking clear-cut boundaries. Therefore the existing administrative boundaries do not necessarily match the functional ties that are central for defining the area. Moreover, as the functional interconnections that link the region transform, the boundaries of the region change as well, as they are not fixed in time (Levelt & Janssen-Jansen, 2013)

In this report, when discussing theory the terms are used interchangeably. However, when discussing the case of Amsterdam, always a distinction will be made between the City Region of Amsterdam and the Amsterdam Metropolitan Area, as these are two different entities.

Already shortly after the Second World War, Dickinson (1947) firstly introduced the term city region, describing a change in city configurations that started to take place with the industrialisation and urbanisation of our society. This change can be seen as the transition from cities to city regions or metropolitan areas. Dickinson saw two fundamental differences between modern cities and cities of the past. Firstly, the modern city had changed in character and complexity of city functions. Secondly, because of the availability of rapid transport the modern city did not necessarily had to involve the concentration of population in small areas within which all needs had to be satisfied and within which all the institutions of town society had to be concentrated. Instead of being a compact settlement unit, Dickinson saw the modern city region as headquarters of a group of interrelated towns and satellite settlements. Dickinson sketched the city region as primarily being a functional entity, geographically extending as far as the city exerts a dominant influence (Dickinson, 2013).

This interconnectivity with the surrounding towns is still true for city regions of today, however in our network-minded society the traditional hierarchical model of a core city dominating its urban hinterland has become increasingly obsolete. Today we rather perceive the city region as being polycentric, due to the process of selective decentralisation of particular urban functions, and the simultaneous reconcentration of others (Luthi, Thierstein, & Goebel, 2010). Therefore, even though the metropolitan area usually gets its name from one or several core cities, it cannot be stated that these cities are necessarily dominant, as the whole region is interdependent.

This new urban form contains a number of cities within commuting distance, and one or more international airports that link the region with other parts of the world (Hoyler, Kloosterman, & Sokol, 2008). The city region is more than merely an "enlargement of an old photograph" (Musterd & Salet, 2003). It entails the formation of a substantially different urban constellation in which new relationships have to grow between functional networks that are diverse and highly changeable. Markets that are increasingly functioning on a regional level are the labour and housing market, but also urban facilities such as health care, education, culture and recreation have increased their reach. Often it is difficult to

delineate one straight-forward metropolitan region, as different activities in the region are conducted at different levels (Musterd & Salet, 2003).

It is not up to the government to simply decide on the growth of metropoles (Salet & Thornley, 2007); the transition from city to city region is influenced by many social and economic process and happens in a rather haphazard way, not following a controlled or predetermined plan (Musterd & Salet, 2003). These developments and the resulting need for policy coordination are brought forward by internal regional forces, but also by external global forces, as the city region can be considered a node in the international economic network of city regions with a regional embeddedness. In order to remain competitive, to expand its economic position and to make an impact in European, and sometimes even national politics, favourable conditions need to be in place for a city region to develop and profile itself as an international metropole. External information exchanges are crucial in order to achieve this (Hall, 2001).

In the struggle for international footloose capital, most European metropoles are having a hard time to keep up with the rapidly developing reality of Asian dominance. McKinsey predicts that – if things will continue the way they are – in 2025 in the top 75 of most dynamic cities 40% will be Chinese and only 3 European cities will be represented (Dobbs et al., 2012). This underlines the necessity for European cities to step it up a notch and start reinventing ways to become more competitive as metropolitan regions. However, whether old cities with long-established cultural and social norms are able to do this is questionable. People's mental maps do not yet feature a strong identification with the metropolitan region (Musterd & Salet, 2003). The strictly delineated cities from the past are institutionalised parts of our society, forming not only the physical but also the social infrastructure of our behaviour. Institutions are formed by the interactions of actors in the past and thus provide a source of stability and a handle for co-operation. But this bias of previous interactions, views and power relations also means that this behaviour is difficult to change and reforms can be obstructed or hampered (Klijn & Koppenjan, 2006).

So although the urban laboratory is continuously moving on all sides, people still seem to have difficulties to adjust communications and networks to the new situation. Current city configurations are often battled for in the past and therefore the established norms of urbanism are not easily given up (Musterd & Salet, 2003). Quite often the large cities in city regions are not prepared to think beyond their city-centred interests yet and behave as "urban prima donnas" (Salet & Thornley, 2007). However, local issues are conditioned by supralocal causes and local actions have a supralocal impact (Jessop, 2009). Therefore, when it concerns regional issues, the sum of inadequate local policies will not be sufficient (Levelt & Janssen-Jansen, 2013). Currently, because of a lack of a complementary regional strategy, instead of collaboratively forming a strong region, cities in one region regularly compete for the same functions and display copycat behaviour (Musterd & Salet, 2003).

There is a significant coordination problem in developing and implementing a visionary regional strategy, as the growing metropolitan region is not fully accepted psychologically by either citizens or politicians and has not crystallised into administrative frameworks yet. As there usually is no administrative structure to respond actively to the new metropolitan dynamics, the new urban realities may have to deal with a large amount of administrative structures and local bodies (Musterd & Salet, 2003). Nearly all urban regions in Western Europe are currently struggling with the question of how, and in what way, metropolitan governance and policy can once again be brought into harmony (Salet & Thornley, 2007).

As long as the conditions are not right for a regional vision to develop, metropolitan regions are not able to completely address all the supralocal issues, but most importantly they also are not able to reap the rewards and synergy effects of intensive regional collaboration.

2.1.1 Transition from Amsterdam to Amsterdam Metropolitan Area

Even though – as explained in the previous paragraph - regional collaboration can be difficult to achieve, the city of Amsterdam has already made large steps towards a more regional urban form. While in the past Amsterdam was sometimes known as '*the state of Amsterdam*', currently the city has made steps towards regional collaboration on certain topics.

Ever since its role as centre of trade, influential port and wealthiest city in the world in the 17th century, Amsterdam has been developing as a prosperous and dominant middle-point within its region (Janssen-Jansen, 2011). However, even in Amsterdam, a city with a large radial history, the dominance of the central core is rapidly decreasing and a much more non-hierarchical polycentric model with criss-cross movements between several local centres of the urban region has been rising over the last decades (Bontje, 2001). This was partly stimulated due to the Dutch national "concentrated deconcentration" policies, through which Dutch planners gave priority to the development of nearby cities such as Purmerend, Haarlemmermeer and Almere in order to cater to the growth of Amsterdam, rather than densifying or expanding the capital itself.

Amsterdam has been collaborating with the surrounding municipalities since the 70s, when the Informal Consultation Amsterdam Agglomeration was set in place, an informal consultative body (Stadsregio Amsterdam, n.d.). By initiative of the collaborating municipalities this informal structure got its own board in 1985 and was renamed into the Regional Body Amsterdam (Regionaal Orgaan Amsterdam - ROA). However, the collaboration was still voluntary and in the early 90s the national Government decided that there was need to collaborate in a more formalised structure. In 1995 therefore a local referendum was held on the topic of the formation of a serious city region or even a city province by dissolving the existing municipalities. The results of the referendum were overwhelming; over 90% of the voters were against the formation of this city region. The surrounding municipalities were willing to collaborate on several issues, but were not willing to give up their independence for the sake of a single powerful regional body (van Leeuwen, 2009).

Therefore the ROA continued to exist in its less formal structure, to be renamed into the City Region of Amsterdam (Stadsregio Amsterdam – SRA) in 2007. Consisting of 16 municipalities in the surroundings of Amsterdam (Appendix A), the City Region is currently mainly responsible for traffic and public transport, but also has a few other regional coordination tasks. However, the geographic scale of the City Region was perceived too limited to tackle some of the spatial economic challenges in the region, especially as some important actors such as the city of Almere were not part of it. Therefore, an additional consultative association of municipalities and provinces was set up in 2000: the North Wing Consultations. The North Wing started as a cooperative policy network that allowed actors to discuss relevant issues in the field of spatial planning, economics and infrastructure in an informal way, without being forced to make commitments. After a few successful collaborative efforts in attracting government funds to the region, the region was renamed into the Amsterdam Metropolitan Area. (Janssen-Jansen, 2011). The Amsterdam Metropolitan Area (AMA) consists of 36 municipalities and two provinces (Appendix A) and is the strongest economical region of the Netherlands, specialised in services, with an increasing importance of knowledge-intensive industries. The current policy agenda of the AMA is to increase the competitiveness of the region and to promote the Amsterdam region as an attractive location for enterprises (Bontje & Sleutjes, 2007). The Amsterdam Metropolitan Area (AMA) itself does not have concrete policy instruments; it is currently more of a collaborative think-tank and a marketing tool.

As becomes clear from the basic statistics on Amsterdam, the City Region of Amsterdam and AMA in Table 1 and is visualised by Figure 4, it makes a big difference which of these three levels policy makers are considering in decision-making and on which level this decision-making is organised.

In conclusion, after over thirty years of regional collaboration, the two main collaborative bodies in the Amsterdam region - the City Region of Amsterdam and the Amsterdam Metropolitan Area - have achieved a large step forward towards a more comprehensive development in the region. However, the idea of the Amsterdam Metropolis is not yet a common concept (Janssen-Jansen, 2011). As there are no fixed responsibilities, territory, and hierarchical capacities at the regional level, the policy network relies on the capacities of the individual participant organisations (Levelt & Janssen-Jansen, 2013). Whether these voluntary collaborations are sufficient when decisions need to be made on a more operational level, in which short-term local interests have to be balanced with long-term metropolitan interests, is questionable (Janssen-Jansen, 2011).

TABLE 1: BASIC STATISTICS OF AMSTERDAM (SOURCE: CBS.NL, STADSREGIOS.NL)

	Size (x1000 km²)	Inhabitants (millions)
Municipality of Amsterdam	0.2	0.8
City Region of Amsterdam	1	1.4
Amsterdam Metropolitan Area	1.8	2.4
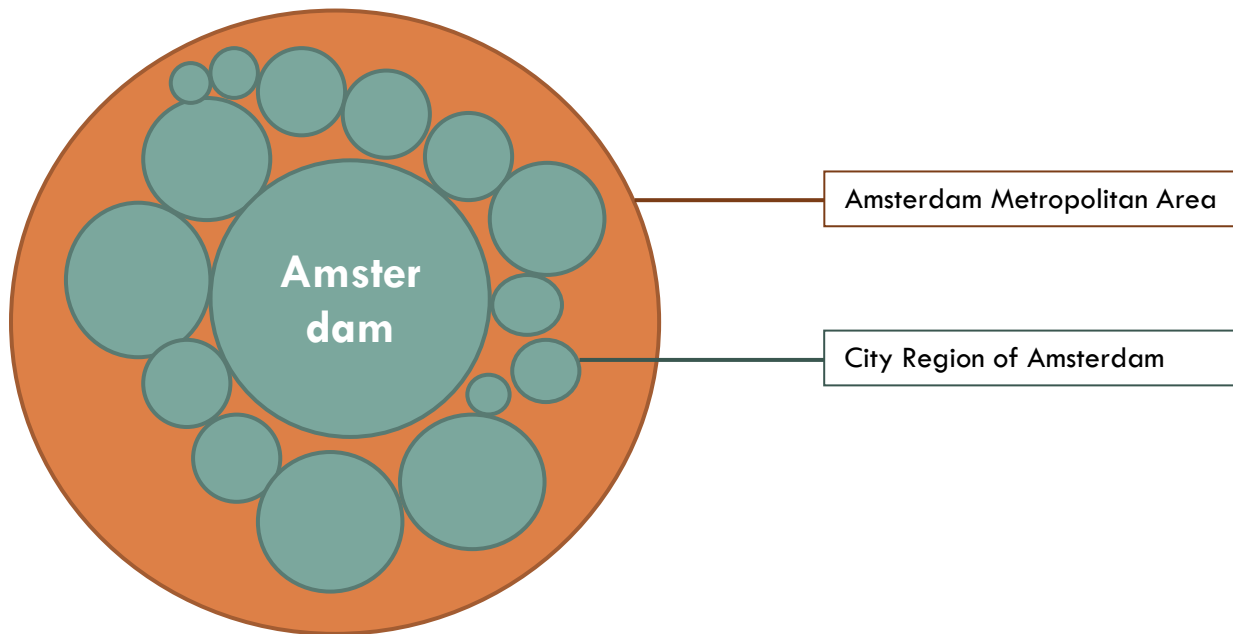
FIGURE 4: AMSTERDAM, CITY REGION AND AMSTERDAM METROPOLITAN AREA

2.2 Transition From Airport to Airport City and Further

Not only cities are broadening their horizons, but also the influence of the modern airport that connects the metropolitan area with the rest of the world reaches far over the airport fence.

The dependence of our modern society on the accessibility, reliability and convenience of globally interconnected air transport and the constant deliveries of goods transported by airplanes continues to rise (Kesselring, 2010). Airports all over the world have gone through a transformation process from small mechanistic-functional terminal facilities into complex, technical, commercial, urban and regional development centres (Conventz, 2010).

In this context airports are tied up in a double objective: on the on hand they are dedicated to global objectives and network building, on the other hand they have to cope with their direct surroundings and local stakeholders. Airports thus have to balance their dynamic role as a facilitator of flows, while also dealing with historically rooted spatial organisations that dominate bounded geographic spaces (de Jong et al., 2008).

Even though many Western cities have seen several moments of depression and shrinkage over the last decades, a continuous growth can be observed around airports, which have produced an enormous urban output (Schlaack, 2010). Airports have become strategic locations in the globalisation process and their significance now transcends their practical function. Airports may still be transit points functioning to link land and air travel, but they can no longer be seen as "no-places". Instead they are gateways to the world, job machines, logistics and service centres, not to forget places of fun and experience (Kesselring, 2010).

Peneda et al. (2011) identify several new trends that profoundly affected airport business:

☐ Privatisation or limited governmental aid;

☐ The rise of small airports stimulated by the rise of low-cost carriers, and

☐ The increasing power of airlines due to worldwide alliances.

As a consequence airports are more and more forced to engage in non-aeronautical activities to diversify their source of revenue to protect themselves from the volatile nature of contemporary aviation (De Jong, Suau-Sanchez, Dross, 2008).

Moreover, as a direct node between global and local, the airport area can be seen as a glocal place, a key-location for global-local-interplay in which the overlapping and interdependence of macro and micro levels are particularly evident. More often advantage is taken of the potential and possibilities of strategic developments around the airport, which has shifted the general economic focus from airside to landside (Schlaack, 2010). As a result, from merely being an air-station in the 1960s, airports have also become shopping centres in the 1970s, attained business centres in the 80s and have seen the addition of entertainment and leisure activities to the airport area in the 90s (Hartwig, 2000).

One of the most important differentiating activities airports are increasingly undertaking is entering the real estate business surrounding the airport area, which led to many new development concepts, such as the airport city. Various other terms that are being used in literature to describe the phenomenon of the expanding influence of the airport are "avioport", "aeroville", "aeropolis" and "aviapolis". All these terms have in common the favouring of aviation as central to inter-urban transportation, endorsement of mixed-use and non-aviation development (Freestone & Baker, 2011). While in the past the airport influenced the surrounding region merely through its aviation activities, the boundaries between airport and region have blurred even more due to the land-based activities airports are increasingly undertaking.

2.2.1 Transition from Schiphol to Schiphol AirportCity and further

Just like many other international hub airports Amsterdam Airport Schiphol has evolved from airport to airport city and even further. Schiphol was originally founded in 1916 as a small military airfield, but nowadays covers over 28 km^2 of land in the municipality of Haarlemmermeer, compared to for example the 8 km^2 that the city-centre of Amsterdam covers. The current airport operates with five main runways, but makes use of a single-terminal concept, which makes the airport efficient for transfers (van Wijk, 2007).

The airport is operated by the Schiphol Group NV, principally owned by the State of the Netherlands, which has a 70 per cent share. Other shareholders are the municipality of Amsterdam (20%), Aéroports de Paris (8%) and the municipality of Rotterdam (2%). Even though the name of the airport suggests differently, the exact location of the airport is not within the city borders of Amsterdam, but in Haarlemmermeer, an adjacent municipality.

Schiphol is amongst the largest European airports, fulfilling an important hub-and transfer function and making the airport a '*gateway to Europe*'. In 2012 the airport transported 51 million passengers and 1.5 million tonnes of cargo to 317 destinations all over the world (Figure 5). This makes Schiphol the fourth-largest European airport concerning passenger numbers and number three when it comes to cargo. Approximately 70% of the air traffic from and to AAS can be attributed to home carrier KLM and its SkyTeam partners (Schiphol Group, 2012).

Amsterdam Airport Schiphol

	317	direct destinations
	51 million	passengers, 1.5 million tonnes of cargo
	423,400	air transport movements
	290,000	jobs in the Netherlands, 64,000 people are employed at the Schiphol location
	650,000 m²	terminal area, five main runways on 2,787 hectares
	3.9 billion euro	total value of fixed assets
	500	companies located at Schiphol
	26 billion euro	contribution of aviation sector to the Dutch Gross National Product

FIGURE 5: OVERVIEW OF AMSTERDAM AIRPORT SCHIPHOL STATISTICS 2012 (SCHIPHOL GROUP, 2012)

The development of Schiphol to the large international hub airport it is now, did not happen overnight. Dierikx and Bouwens (1997) define four different stages in the development of the airport up to present (Figure 6).

1916 - 1945 The start ⟩ **1945 - 1967 Growth within limits** ⟩ **1967 - 1985 Rapid development** ⟩ **1985 - Present Mainport strategy**
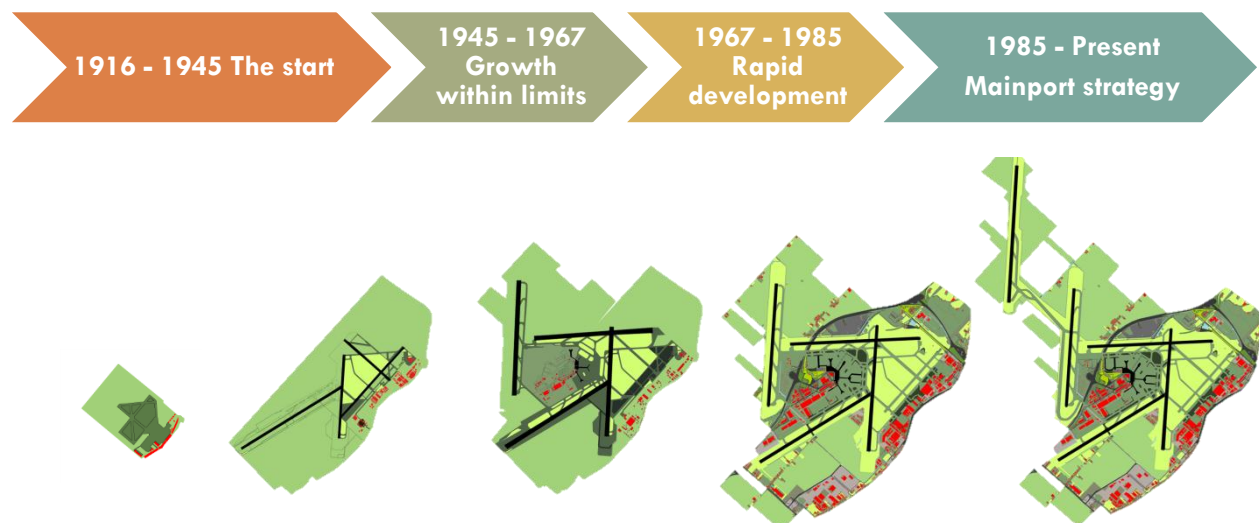
FIGURE 6: STAGES OF DEVELOPMENT OF AMSTERDAM AIRPORT SCHIPHOL (DIERIKX & BOUWENS, 1997), ILLUSTRATED WITH IMAGES BY EL MAKHLOUFI (SOURCE: WWW.URBANNEBULA.NL)

Schiphol's function changed from a military to a mixed use airfield with the creation of the Dutch aviation company KLM in 1919. In these very early years Schiphol, Amsterdam, KLM and the national Government worked closely together towards the development of civil aviation activities in the Haarlemmermeer polder. In 1926 Amsterdam took over the airport and invested significantly in the improvement of facilities. In this first stage both Schiphol as KLM were operating at a loss and had to be supported by Amsterdam and the state (El Makhloufi, 2012).

However, as the importance of air traffic kept increasing, the Dutch government had to make an important decision about a strategic location for its national airport. Amsterdam and Rotterdam already had existing airports, but there were also plans to construct a new, modern airport at a central location in the Randstad near The Hague. The cities of Amsterdam and Rotterdam reacted furiously to the plans for possibly constructing a new airport and managed to successfully generate public protest. Confronted with fierce opposition, the national Government aborted their plans for the development of a new airport and finally assigned Schiphol the status of national airport in the end of 1945 (El Makhloufi & Kaal, 2011).

In this second stage of the development (1945-1967) Amsterdam and the Ministry of Transport further expanded the airport. However, Amsterdam was no longer able to finance all the planned developments and therefore decided to sell a majority of the airport to the Dutch state in 1958. In this stage the airport was able to grow due to a strong position of KLM as third largest carrier in the world and due to a strong national focus put on the quality of Schiphol's worldwide aviation network (van Wijk, 2007).

In the third development stage (1967-1985) Dierkx and Bouwens have identified an accelerated development in aviation, which was also characterised by airports improving their organisation and increasing the share of non-aviation revenues. From the 1960s onwards popularity of air transport boosted, due to a rapid economic growth and an increasing prosperity, which made transport by airplane accessible for more people. Moreover, the introduction of the jet engine triggered cost reductions and slowly made airplane traffic into a mass product (de Jong, 2006).

Even further growth of aviation can be witnessed in the fourth stage from 1985 up to now. In this period a simultaneous rapid development of both airside as landside activities took place at Schiphol (van Wijk, 2007). Because of a small catchment area transfer passengers had always been important for Schiphol, but in the 1980s the number of transfer passengers grew faster than the total amount of passengers (de Jong, 2006). The Dutch government has stimulated this development by appointing Schiphol a national 'Mainport' status. The term Mainport was initially defined as a transportation junction where different modalities meet and was originally used for the harbour of Rotterdam, but the concept was broadened by the van der Zwan committee and the transport lobby in 1986. The Dutch government took over the Mainport concept in the Fourth Report on Spatial Planning (Ministerie van VROM, 1988) in which it expressed a common belief in the economic importance of the airports' development. The government emphasized that the hub and gateway functions of the Mainport and the significance of its connections with the hinterland were critical for further development of the country (de Jong, 2006). The Fifth Report on Spatial Planning (Ministerie van VROM, 2001) ever more emphasised the importance of strengthening the competitive position of the Netherlands in Europe by improving the Mainports and their international transport possibilities. However, this report also emphasised the importance of improving and sustaining the quality of space and the environment around Schiphol. This combination of economy and environment is now known as the double objective of Schiphol.

In this last period Schiphol also started exploiting the AirportCity concept based on many different types of enterprises at the airport itself and various joint building and land development ventures with other corporations and government bodies (Freestone, 2009). Because of Schiphol's status as an airline hub of AirFrance-KLM, a disproportionate passenger flow is created, which, by assembling transfer flows, supports additional flights and enhances the region's air accessibility. The passenger flows help Schiphol to generate non-aeronautical revenue through expanded retail operations and helps support on and off airport real estate development (Appold & Baker, 2010). Landside revenues herewith gained importance (van Wijk, 2007). For example, in 1995 Schiphol Plaza, a shopping mall accessible also for non-passengers was inaugurated and Schiphol Real Estate delivered its first projects. Nowadays the Schiphol Group actually even obtains higher yields with its landside activities than with aviation operations (de Jong et al., 2008).

Of course the development of Schiphol has happened in a dynamic way and the categorisation into four development stages by Dierikx and Bouwens is just one of the several ways in which one could divide the fast development of the airport in the last century. However, what becomes clear by the division of Dierikx and Bouwens is that up to now the focus and role of the airport has changed approximately every 20 to 30 years. A similar trend can be seen when analysing the years in which heavy political debates have taken place on possible reconfiguration or relocation of Schiphol airport: 1958, 1979 and 1999 (van Wijk, 2007). If this tendency is carried through into present times, one could wonder whether we are not currently in a transition period towards another way of perceiving the airport and its function, possibly towards a larger focus on the regional embeddedness of the airport.

2.3 Influence of Transitions on Relationship Between Airport and City

As described in the two previous paragraphs the scopes of the city and the airport have been expanding and the strict boundary between the two has been blurring. Especially in cases such as Schiphol, when the airport is located inside the metropolitan area, the dynamics between the airport and the surrounding area are large (van Wijk, 2007). This paragraph will give more insight into interfaces between the airport and the metropolitan region. The interfaces that are described in this paragraph are loosely based on the airport metropolis interface model by Stevens, Baker & Freestone (2011), (Figure 7). However, instead of looking at governance as a separate interface, this research sees governance as an overarching theme above all the interfaces. Moreover, the two interfaces of Noise & Safety and Sustainability are added to the model.
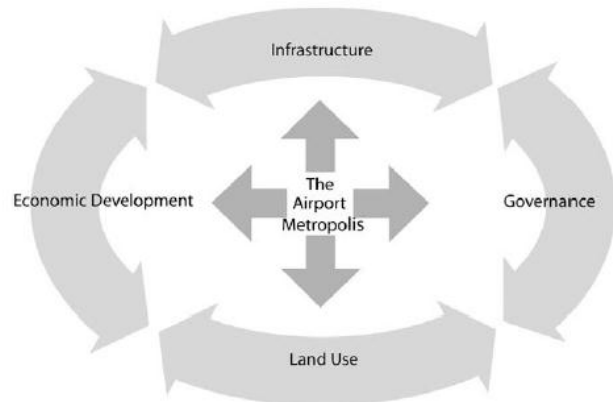
FIGURE 7: AIRPORT METROPOLIS INTERFACE MODEL (STEVENS ET AL., 2010)

2.3.1 Economic development

Hub airports such as Schiphol in particular influence their surroundings as they deliver international accessibility, and make their vicinity compatible with the global economy. Previously already the role of airport as source of international competitiveness and creator of jobs for the region was described. The positive interrelationship between high-quality transport infrastructure, inter-city connectivity,

economic growth and competitiveness has been documented for airports big and small (Freestone & Baker, 2011). Schiphol creates many direct jobs and even more indirect jobs and has attracted many European headquarters and distribution centres to the region. Therefore, de Jong et al. (2008) even state that the influence of a hub airport is comparable to that of a large city.

However, the airport and city interact on more than merely economic levels, as will become clear from the discussion of the other interfaces.

2.3.2 Noise & safety

One of the most discussed influences that the airport has on its surrounding area actually is a negative one: noise and safety. Obviously the noise from air traffic influences the possibilities of the city around it. Literature suggests that a large exposure to aircraft noise can lead to adverse health effects (Franssen, van Wiechen, Nagelkerke, & Lebret, 2004).
In 2012 over 130,000 complaints were filed at BAS, a special organisation for people that experience hindrance due to Schiphol's air traffic (BAS, 2013). This amount of noise perception is relatively high compared to other major European hubs such as London Heathrow, Paris or Frankfurt. This is especially interesting since less noise is produced by the air traffic around Schiphol compared to these other airports. Moreover, in the surroundings of Schiphol there are less dwellings in high-noise zones (>55 Lden dB(A)) (Gordijn, Hornis, & Aykac, 2006). Several researchers explain this high noise perception around Schiphol due to non-acoustical factors (Flindell & Stallen, 1999; Kroesen, Molin, & van Wee, 2011; Suau-Sanchez, Pallares-Barbera, & Paul, 2011).

Due to the wide-spread effects of the noise and safety-interface in the Schiphol airport region this topic is much discussed. Some researchers suggest that the discussion about future capacity of the airport is even too much dominated by the noise nuisance issue, while the advantages the airport creates are underexposed (de Jong et al., 2008).

2.3.3 Land use

Also the land use systems of the metropolitan region and the airport cannot be seen separately. Firstly, official noise contours restrain certain land uses in the airport region, making land use planning in the highly urbanised area surrounding the airport a difficult task (de Jong et al., 2008). Planners have to take into account public safety zones around airports and the risks of planning under flight paths. On the other hand the city also limits the development of the airport. Therewith the development possibilities of both the city as the airport are limited due to each other's vicinity.
Moreover, the real estate markets of Amsterdam and the airport region are strongly connected, both when it comes to commercial real estate as for residential dwellings.

From the 1960 onwards companies started to settle in the surroundings of Amsterdam, as the historical inner city was not able to fulfil the increased demand of large-scale offices for the rising service and knowledge economy. Schiphol has responded well to this development by the promotion of their AirportCity concept. In this context Schiphol has become the most prominent growth engine and the largest employment concentration in the metropolitan area. The high value of land in the Schiphol region is reflected in the office rents. Schiphol Center has become the country's top office location achieving the highest office rents countrywide (Conventz & Thierstein, 2011).

Furthermore, shortened travel times and the fact that the city of Amsterdam cannot provide the right living environment for all types of households and social classes (Janssen-Jansen, 2011), have made that the housing market functions increasingly more on a regional level. Next to the city of Almere, Amsterdam also sees a large role for Haarlemmermeer – the municipality in which Amsterdam Airport Schiphol is located - to provide affordable surrounding housing for families in the Amsterdam Metropolitan Area (van Gent, 2009).

2.3.4 Infrastructure & transport

Airports can be seen as important transport nodes in which multiple modes (aviation, rail, road) come together. Herewith airports connect flows on city, regional, national and international levels. This role of airports has a huge influence on the functioning of the entire transport network and mobility in the region. The success of an airport highly depends on the quality of its land-based accessibility and upgrading transport linkages around airports can increase the airport's catchment area, making the airport more attractive (Stevens et al., 2010). Hesse (2013) name several influences that a large amount of external flows, such as coming from airports, has on its surrounding places. One of the effects is that places where many traffic flows come together tend to mimic cities and start competing for business and consumption. Consequently, Hesse states that it is essential for contemporary planning approaches to seek the (re-)integration of flows into the urban fabric.

2.3.5 Sustainability

Airports are often in the epicentre of the growing debate about the global environmental consequences of aviation and therewith the target of strong criticism and opposition in which local struggles seamlessly mesh with regional, national, and international concerns (Griggs & Howarth, 2008). The effect of air pollutants from aircrafts can be seen in a wide area around the airport (Yua, Cheunga, Cheunga, & Henryb, 2004). On the other hand, airports do not only pose a threat for sustainability. Van den Dobbelsteen (van den Dobbelsteen, 2013) on the contrary, sees many opportunities for innovative sustainable solutions in airport regions. He states that the airport is a pivotal point of flows of people, water, food, material, energy and their wastes. The throughput of these flows is very large and mostly linear, as most people and products come from outside the airport region and waste is processed far away from it. This squandering of energy, water and materials can be solved by using the centrality of airports to connect cycles and solve them in interaction with the region.

2.4 Conclusion

While the expansion of the influence of both airports as cities is a global trend, Amsterdam and Schiphol can be seen as quite early adapters in this movement. The municipality of Amsterdam has already been collaborating with its surrounding municipalities from the 1970s on and has institutionalised this collaboration in the City Region of Amsterdam and the less formal body of the Amsterdam Metropolitan Area. In that same period also the reach of Schiphol started to expand through the operationalisation of the AirportCity concept. Due to the expansion of the scope of both airport and metropolitan, increasingly more policy asks for an integral consideration on a higher level than solely airport or city. This chapter has identified five systems that concern both airport as city and function on this higher level: Economic Development, Noise & Safety, Land Use, Infrastructure & Transport and Sustainability. While some of these interface themes are about positive reciprocal influences and distribution of benefits, others are more about negative reciprocal influences and the distribution of risks and costs. When it comes to deciding on this distribution active regional involvement is essential. Traditional forms of hierarchical government are not able to cope with these newly developed interdependencies. Therefore, the next chapter will discuss new network-oriented forms of policy-making.

3 MULTI-LEVEL GOVERNANCE OF COMPLEX SYSTEMS IN A NETWORK ENVIRONMENT

This chapter firstly provides some theoretical background on the transition from government to governance in Paragraph 3.1. Paragraph 3.2 then provides a general definition for governance based on several existing definitions from literature. Paragraph 3.3 typifies city and airport regions as complex systems and thereafter describes the characteristics of governing such complex systems. Paragraph 3.4 elaborates on multi-level governance and the game of shifting between different levels and scales of governance. This chapter ends with a few critical comments on the governance approach from literature.

3.1 Transition from Government to Governance

Traditionally, policy is made by a limited number of hierarchical government levels without overlaps in tasks. According to this principle most states have a three-level system of national Government, provinces and municipalities. In this system the power of the lower level governments is restricted through hierarchical mechanisms by the higher level governments. This style is characterised by a large government influence, and is also known as the monocentric, classical modernist, hierarchical or command and control-approach (Termeer, Dewulf, & Lieshout, 2010).

However, as critique of the traditional government-influenced style of policy making, more network-oriented types of policy making have been developed. Still many policy practices are influenced by traditional hierarchical institutions, however, when traditional forms of problem solving and policy making are not sufficient, these institutions are more often faced with alternative, ad-hoc policy arrangements. The upcoming of these alternative arrangements does not necessarily mean a complete rolling back of the state, but it does lead to the redefinition of the role of the government (Hajer, van Tatenhove, & Laurent, 2004).

Like in many other countries, this redefinition of the role of the government can be witnessed in the Netherlands. Many national policy documents show a hollowing out or retreating role of the Dutch government. In the previous decade the adage of the Dutch government was: 'decentralised where possible, centralised where necessary' (*decentraal wat kan, centraal wat moet)* and the National Spatial Strategy (Ministerie van VROM, 2004) was founded on this principle. However, the current National Policy Strategy for Infrastructure and Spatial Planning (Ministerie van IenM, 2012) takes the decentralisation even further. The new motto this document is based on is 'decentralised, unless…" (*decentraal, tenzij…*).

This rescaling of the state entails a 'change from centralised bureaucratic decision making towards a plurality of networks and partnerships between government, business, and other nongovernmental agents' (van der Heiden & Terhorst, 2007, p. 343). To a greater extent governmental organisations are functioning in similar networks as private actors, which makes implementation of policies and projects increasingly complex and requires cooperation with various actors. Herewith the classic separation between market and hierarchy or between public and private is fading (Teisman & Klijn, 2002) and a more horizontal structure is rising, which in many cases has a better problem-solving ability.

De Bruijn and ten Heuvelhof (2008, p. 10) discuss the differences between the characteristics of the hierarchical and network-like decision-making as follows (Table 2):

TABLE 2: CHARACTERISTICS OF A HIERARCHY AND OF A NETWORK (DE BRUIJN & TEN HEUVELHOF, 2008)

Hierarchy	Network
Uniformity	Variety
Unilateral dependencies	Mutual dependencies
Openness/receptiveness to hierarchical signals	Closedness to hierarchical signals
Stability	Dynamic

These policy networks are not an entirely new phenomenon in policy practice, but their growing influence on policy on a national, subnational and European level is a relatively new trend (Hajer et al., 2004).

This departure from traditional forms of government in contemporary societies is commonly referred to in social sciences as the term 'governance' (Nuissl & Heinrichs, 2011).

3.2 Definition of Governance

Even though the published literature on the term governance is numerous, the definitions of governance vary amongst different researchers. For instance Lynn, Heinrich and Hill (2002, p. 7) use governance in a very broad definition of "regimes of laws, rules, judicial decisions, and administrative practices that constrain, prescribe, and enable the provision of publicly supported goods and services." In this definition no specification is made about whether these governance practices are performed by public or private decision-makers. Another common definition of governance is that governance is the collection of steering actions of public authorities to shape their environment (Mayntz, 2003). Similarly, Kooiman (2003, p. 4) is more specific about the actors involved in governing activities. He states that governance is "the totality of interactions, in which public as well as private actors participate, aimed at solving societal problems or creating societal opportunities." Also in this definition governance is meant to provide public goods or solve societal issues. However, Kooiman makes a more specific distinction of actors involved and introduces three different modes of governing activities: hierarchical governance, self-governance and co-governance. In hierarchical governance governing is the domain of the government and the non-governmental actors fulfil only a submissive role. Self-governance, on the other hand, is dominated by non-governmental actors, where governments keep their distance. A combination of the two is co-governance, a governance form where collaboration between governmental and non-governmental actors is the only way to achieve beneficial outcomes. Koppenjan and Klijn (2004) correspondingly acknowledge the dependence of parties involved in governing by defining governance as the coordination of activities around collective problems by mutually dependent actors.

Thus, based on the previously stated governance definitions from literature three important elements of governance can be deducted. Governance involves:

☐ Interactions, collective decision-making, coordination and steering mechanisms;

☐ Performed by mutually dependent public and/or private actors;

☐ To ensure the provision of public goods and services and/or to solve collective, societal problems.

This combined definition of governance will be adopted for the rest of this research.

3.3 Governance of Complex Systems

Given the different definitions of governance provided in the previous section, it becomes clear that governing is a complex task. Nevertheless, this task becomes even more convoluted when taking into account the complexity of the environment in which governance often takes place. Most often governance systems are dealing with highly complex issues including a large variety of variables such as actors, interests, values and policy arrangements. As this is potentially an infinite set of variables, governance poses the problem of complexity reduction by identifying a subset of features of relevant activities that are sufficiently governable. This entails a "paradoxical dialectic between the governance of complexity and complexity of governance" (Jessop, 2009, p. 80).

Van Buuren et al. (2012) discuss six distinct characteristics of complex systems that apply to governance systems (Table 3).

TABLE 3: SIX DISTINCT CHARACTERISTICS OF COMPLEX SYSTEMS THAT APPLY TO GOVERNANCE SYSTEMS (VAN BUUREN ET AL., 2012)

Characteristic	Description
Fragmentation and connectedness	Complex systems consist of connected subsystems, which are to some extent autonomous and follow their own logic.
Non-linear Dynamics	Actions and interventions within complex systems can have highly unpredictable consequences.
Self-Organisation	In complex system there is no external or internal actor who is fully in charge and therefore structures evolve and are maintained without external control.
Path Dependency	Historical evolution often determines what is possible in the future development of complex systems.
Coevolution	Because of the different subsystems which are embedded in large sets of systems, reinforcing or dampening feedback patterns occur.
Instability as status quo	Complex systems are constantly in flux and therefore open for distortion and change.

Pelikan and Wegner (2003) also agree that because of the many complex dimensions of governance systems recommendations of for example standard economics are especially inappropriate. Similarly, Pierre and Peters (2005) argue that many forms of governance systems are not good at coping with the complexity of change and uncertainty. They are of the opinion that state-dominated governance models have distortion in their information flows between the different levels because of multiple veto points and strong institutional structures. Therefore they are likely to provide strongly biased or poor feedback. Moreover, they declare that state-dominated governance models have a very low adaptability. While they argue that government models in which the state has a weak role are more adaptable due to organisational flexibility, also these systems suffer from information deficiency.

Duit and Galaz (2008) even take governing complexity to a next level by stating that governance systems should be viewed from a complex adaptive systems (CAS)-perspective. While the general definition of complexity implies change, uncertainty and limited predictability complex adaptive systems have features that result from their emergent properties. Their view is that only the CAS-perspective is able to capture the cross-scale interaction effects within nested governance systems rather than just within organisations.

It can be concluded that many authors agree on the complexity of governance. However, the causes of these complexities and ways to deal with it differ greatly. In any case the complexity of governance systems and the environment they are operating in requires a holistic approach that understands the whole and not only the parts. At the same time it is still essential to know that the whole consists of different parts that all have the ability to act without external control (Buuren et al., 2012).

The development of airport regions is a typical example of a complex system, as it comprises a wide variety of actors, interests, values and policy arrangements. The system becomes even more complex if we consider the airport region to have interfaces with both the airport as the corresponding metropolitan region. Consequently, its dynamics and outcomes are difficult to predict and manage and air transport planning is therefore controversial and complicated (Boons, Buuren, & Teisman, 2010). Many other sources of literature seem to underpin the complexity of airport regions and their governance, especially within the changed context of the last few decades due to the extensive liberalisation measures that took and are still taking place (Freestone & Baker, 2011; Peneda et al., 2011).

Thus, it can be concluded that the governance of the interfaces between airports and city as such can already be classified as highly complex, but the recent developments towards metropolitan regions and airport cities have made the scope and interactions even wider and therefore have added to the complexity. The development of the Schiphol area can be seen as the result of the variety of actions, interactions, interferences within a complex governance system, with several subsystems. Located within their specialty area, all the subsystems have their own constellation of actors, interaction arrangements and dynamics that relate both to the content and process of their work. This makes the Schiphol area a very complex, nested governance system (Buuren et al., 2012).

3.4 Multi-level Governance and the Search for the Right Scale

As the level of the national Government is no longer the most evident policy-making level, policy-making competencies are shared in a system of negotiation between nested governments at several tiers (local, regional, national and supranational) on the one hand and private actors (citizens, producers, NGOs, consumers etc.) on the other (Hajer et al., 2004). This is also known as multi-level governance. The game of shifting between different policy-making levels or scales is interesting to study and was already addressed by Vincent Ostrom in 1961. As public goods are not all of the same scale, governance must operate at multiple scales in order to capture the variations in the territorial reach of policy externalities (Termeer et al., 2010). Multi-level governance is not static, but the collaborative arrangements between the public and private actors at diverse jurisdictional levels are constantly shifting; they come and go as the demands for governance change. Where the traditional hierarchical approach opts for an ideal scale and rejects obscure forms of (regional) cooperation, multi-level governance does not put faith in structural changes. In the contrary, it accepts the complicated multi-level structure as given and then looks for formal and informal arrangements to handle scale interdependencies effectively (Termeer et al., 2010). This possibility to adjust the scale of

governance to reflect heterogeneity is seen as a big advantage of multi-level governance. Other benefits that are often mentioned are that it provides a more complete picture of constituents' preferences, that it is more open to experimentation and innovation, and that it facilitates credible commitments (Hooghe & Marks, 2003).

Even though multi-level governance arrangements are more flexible, at a certain moment policy problems will have to be framed at a certain policy level, or as a short-term or long-term problem. This is an interesting political game, as this has consequences and influences interdependencies between actors, including the distribution of resources and power-relations (Termeer et al., 2010).

As explained in Chapter 2, increasingly more systems function on a regional level. The European Union also gradually views regions as the appropriate level for the implementation of for example agricultural and rural policy. However, these regions do not fit within the traditional hierarchical geographical boundaries of municipalities, provinces, or states. This mismatch is sometimes referred to as the regional gap or institutional void. Following the multilevel governance approach, the solution for this mismatch is not in the creating of new layers of government, but rather in changing the multilevel structure to match the governance systems better with the problems in the social-ecological system (Termeer et al., 2010). However, there is no right way in which this change should take place. If we return to the representation of the current governance structure in Chapter 1 - Figure 2, there would be several ways to achieve a more integrated regional governance. One integration step could be the horizontal merge by combining the governance collaborations that concern the same topics (land use, infrastructure etc.), but happen on different geographical scales (Amsterdam, Haarlemmermeer, Schiphol etc.). This is schematically represented in Figure 8.
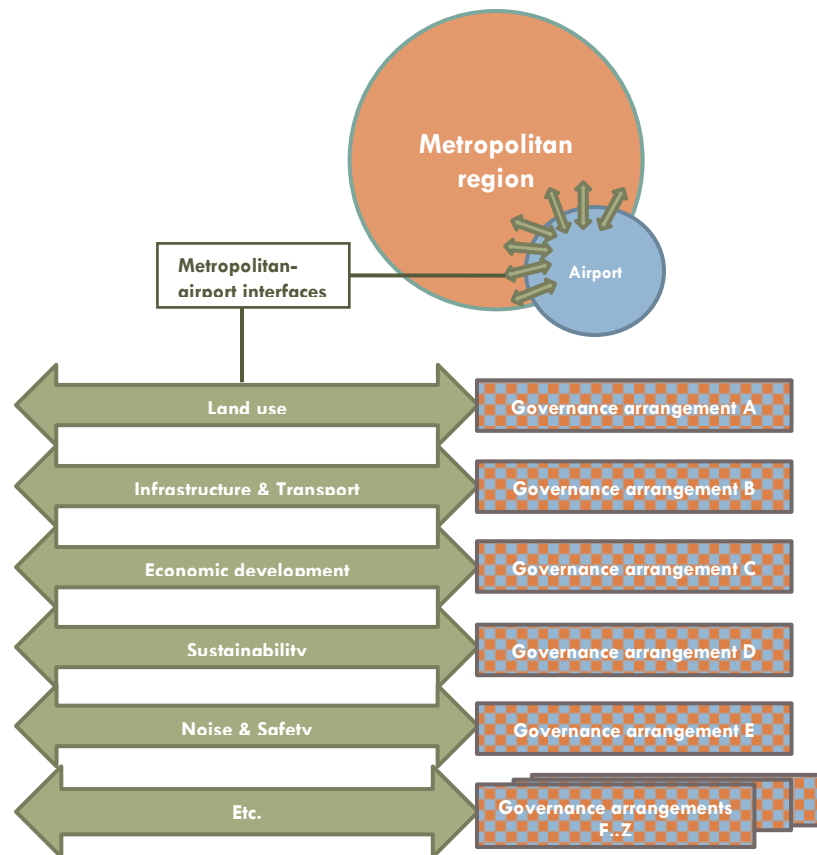
FIGURE 8: SCHEMATIC REPRESENTATION OF HORIZONTAL MERGE OF GOVERNANCE ARRANGEMENTS

An even further integration step would be to not only integrate the geographical levels on which decision-making is taking place, but to also integrate several of the substantial themes these governance bodies are involved in, as far as these themes are interrelated (Figure 9).
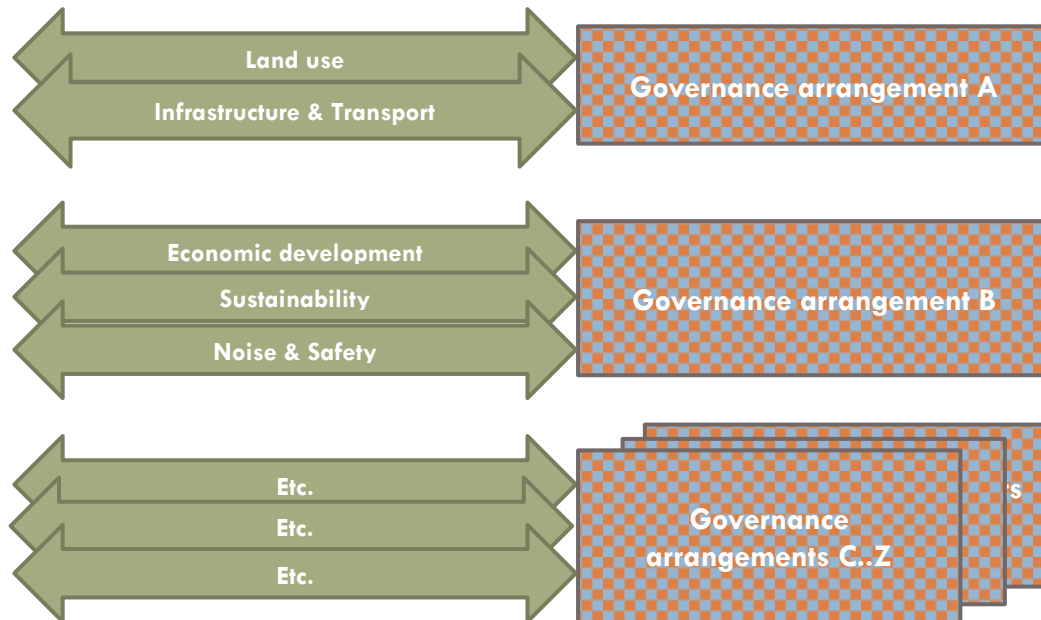
FIGURE 9: SCHEMATIC REPRESENTATION OF HORIZONTAL AND VERTICAL MERGE OF GOVERNANCE ARRANGEMENTS

The ultimate governance integration would be not to focus on interfaces but rather to perceive the airport as an integrated part of the metropolis - the airport metropolis – and to have one great metropolitan governance arrangement covering all substantial themes of this airport metropolis (Figure 10).
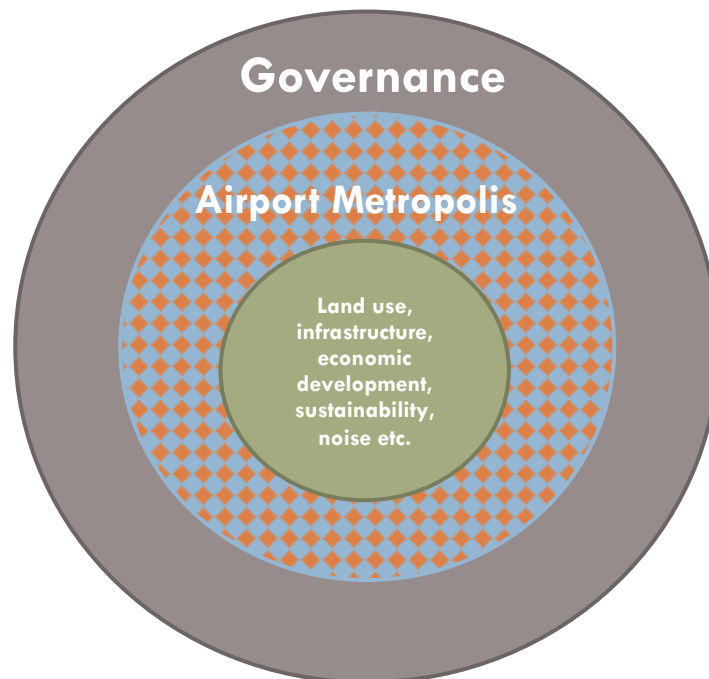
FIGURE 10: SCHEMATIC REPRESENTATION OF ULTIMATE GOVERNANCE INTEGRATION: AIRPORT METROPOLIS

The last two forms of integration (Figure 9, Figure 10) are still very far away from current practices in the Amsterdam city region. However, the integration that is schematically represented in Figure 8 is already partially taking place on certain topics. An example of this is the Platform Businesses and Offices (Platform Bedrijven en Kantoren – Plabeka), a collaboration between municipalities in the Amsterdam Metropolitan Area on the topic of land use. This collaboration breaks with the trend of the past in which municipalities were competing with each other and kept including additional office capacity in their development plans, while the regional commercial office vacancy rate was increasing. In 2005 the municipalities decided to collaboratively tackle the problem of the large demand and supply imbalance on the office market, by focusing on the regional quality of offices constructed instead of the local quantity. In order to do this a complex negotiation process had to take place, in which each municipality had to agree to cut back on certain planned office developments (Janssen-Jansen, 2011). This collaboration is still in place and has already produced a second round of cutbacks, as the first one turned out to be insufficient. However, the collaboration is informal in nature and does not provide any enforceable regulations (Janssen-Jansen & Salet, 2009).

The Ministry of Infrastructure and Environment also collaborates with several public regional parties in the SMASH-programme, which is aimed to create a long-term vision for the airport region when it concerns spatial issues. Such collaborations for better integration and cooperation between units are gradually more often being developed to cope with shared problems. When such regional governance collaborations are of an informal nature, they are often difficult to combine with the traditional hierarchical policy-making patterns that are still in place. These initiatives are then often problematic as they have to deal with blurring boundaries between jurisdictions, overlapping authorities, duplicating functions and conflicting responsibilities (Termeer et al., 2010). However, formalising these collaborations is not an easy task. For example, in the Netherlands already several attempts were made to set up a regional Randstad authority. All these attempts have failed due to their threat to existing power relations, perceived lack of democratic legitimacy, and never-ending discussions about the preferred territorial scope. This shows again that we cannot expect governance changes like structural reforms, clarification of responsibilities, new coordination procedures, or better linkages between levels to happen overnight as they carry the weight of past interactions (Termeer et al., 2010).

All of the above represented ways of upscaling governance institutions fit in with the current dominant policy discourse in the Netherlands, in which simplifying administrative complexity is an often named objective. In this policy frame many governmental units, especially municipalities, are considered to be too small to generate the capacity to address societal problems. Larger units are expected to provide more capacity and room for employing specialized civil servants to cope with the growing complexity of societal problems. Moreover, economies of scale also play a role, as bigger governance units are considered to be cheaper. Indeed, organising policy-making on a metropolitan level can be the appropriate scale for many public services.

However, organisation size has an optimum and governmental units can also be qualified as too large (Termeer et al., 2010). The risk is that these large governance bodies with one single dominant centre of decision-making can become victim of the complexity of their own bureaucratical structure. In that case the costs of maintaining control in such a governance body are so great that it can be seen as grossly inefficient (V. Ostrom et al., 1961). Moreover, smaller units might increase the frequency of face-to-face contacts between politicians and citizens, which will enhance political trust (Termeer et al., 2010). Ostrom and Andersson (2008) also agree that a variety of different governance systems at multiple scales has better chances of succeeding in governance challenges than simple, streamlined

systems at any one scale. However, the question is when fragmented systems and overlapping jurisdictions stop having the positive effect of redundancy, but start being so complicated that they threaten legitimacy or effectiveness (Termeer et al., 2010).

Frankly, we cannot really state upfront that a certain government is too large or too small to deal with a problem. It is uncertain whether it is easier to set up a central metropolitan governance system and to sub-optimise that to be able to deal with local issues or to rather try to achieve supra-optimisation in the current polycentric political system. Moreover, it is difficult to conclude on the appropriateness of the size of a public organisation, as long as one does not know everything about all the informal mechanisms. Informal mechanisms might permit the dealing with issues that are on a higher or lower scale than the actual formal governance arrangements that are in place (V. Ostrom et al., 1961).

Even though the transition from government to governance can in many cases provide a better fit with the current network-oriented society, one should keep in mind that governance is not thé answer to all kinds of social and political problems (Hajer et al., 2004). We should not forget that hierarchy is still with us and even networks have some hierarchical elements. We should therefore not dismiss the hierarchical method of decision-making for good (de Bruijn & ten Heuvelhof, 2008). Literature identifies several weaknesses of the governance approach, starting with that a large amount of overlapping collaborative bodies can lead to inefficient decision-making. Moreover, by transferring decisive power from the traditional government levels towards public-private collaborations the democratic legitimacy of decisions can be threatened. The third criticism of governance in literature is that without a shadow of hierarchy governance arrangements will not be able to come to decisions. These three weaknesses of governance are further discussed in Chapter 5, which then discusses whether stakeholders perceive these three weaknesses in the Schiphol airport region.

3.5 Conclusion

This chapter has treated the current policy shift from government to governance. Governance arrangements break with the traditional, hierarchical division between public and private and are often better able to deal with the complexity of a network-like environment. As the interfaces between airport and metropolitan can be characterised as highly complex, there is need for organising policy-making processes in a way that is able to deal with this integration and complexity. In order to deal with this, one could upscale the current governance mechanisms to reach a more integrated regional governance system. This chapter has illustrated three possible steps of governance integration, from partial integration to complete integration. However, even though upscaling governance arrangements has several advantages, there is also the risk that a too large governance arrangement becomes a victim of the complexity of its own bureaucratical structure. No right answer exists to the question on what scale governance should be organised, so the best scenario is if the governance structure is flexible enough to deal with needed changes in scale for different issues. However, even if this flexibility can be reached, the governance approach still has several known weaknesses that might prevent it from reaching effective and efficient results. Therefore, one should not see governance as the solution to all societal and political problems. With the theoretical background of this chapter in mind, the next chapter will take a closer look at how the governance is currently organised in the Schiphol-Amsterdam region.

4 ANALYSIS OF EXISTING GOVERNANCE IN SCHIPHOL-AMSTERDAM REGION

After the theoretical considerations on governance in the previous chapter, this chapter focuses on the governance practise in the Amsterdam and Schiphol region. Eight different collaborative bodies, their composition and goals are introduced in Paragraph 4.1 and 4.2. Paragraph 4.3 critically elaborates on these eight collaborations.

A myriad of actors have always been active in the Schiphol airport region, some of more decisive importance than others. Parties that have been active in the Schiphol debates on long-term basis are the Schiphol Group, KLM, the ministry of Infrastructure and Environment (in the past: ministry of VROM and ministry of V&W), the municipalities of Amsterdam and Haarlemmermeer and the Province of Noord-Holland (van Wijk, 2007). However, this coalition is not a given anymore these days, as the institutional environment has been shifting.

The province has always acted as a regional coordinator and backed the interests of smaller towns in the region (van Wijk, 2007). However, in recent years the position of the province has come under pressure. The increasingly dominant idea that they are a redundant level of government has made the province the least popular governmental organisation. Even though the province still has a few specific tasks by law when it comes to topics such as water management, provincial roads, public space and the environment, their role in policy-making is usually quite limited (de Vries, 2008).

Moreover, the developments that have been described in the previous chapters: the increasing influence of the airport on the environment and the regionalisation of large cities, have also had its influence on the way decision-making in the Schiphol-Amsterdam region is organised. Instead of guiding the development of the region directly through hierarchical instruments, the public parties are increasingly collaborating with each other and a diverse range of other stakeholders. Several governance arrangements have emerged to deal with the negative and positive externalities of the airport presence in the Amsterdam region. This has led to a whole series of ad-hoc forums and coalitions made up of government bodies, non-governmental organisations or a combination of the two. These newly formed relationships, both formal and informal, tend to exert a very large influence. This complex pattern of multi-level and multi-actor governance has taken over policy arenas that were previously administered directly by territorially defined local authorities, provinces and national Governments (Musterd & Salet, 2003).

There is a large amount of collaborations that could be analysed further in this report. However, a selection had to be made. For the purpose of this research only the collaborative arrangements have been selected that discuss one or more of the interface themes defined in the previous chapter. Moreover, only collaborative arrangements were selected that have been established for long-term existence. Eight of such collaborations have been identified and will be further discussed in this chapter. Table 4 gives an overview of the selected collaborations and which of the interface themes between an airport and its adjacent metropolitan region they concern.

The first five of these collaborations are explicitly targeted on airport topics, while the last 3 concern the greater Amsterdam region in general. Next to these long-term regional collaborations, also several temporary collaborations are set up to come to regional visions, such as Plabeka and SMASH, already introduced in Chapter 3.

TABLE 4: SCOPE OF EIGHT COLLABORATIVE PLATFORMS IN THE SCHIPHOL/AMSTERDAM REGION

	Land Use	Infrastructure & Transport	Economic Development	Sustainability	Noise & Safety
1. Regional Authorities governing Schiphol (BRS)				x	x
2. Schiphol Regional Consultative Committee (CROS)				x	x
3. Alders Table				x	x
4. Governmental Forum Schiphol (BFS)	x		x		
5. Amsterdam Airport Area (AAA)	x		x		
6. City Region of Amsterdam (SRA)		x			
7. Amsterdam Metropolitan Area (AMA)	x	x	x	x	
8. Amsterdam Economic Board (AEB)			x		

4.1 Airport-related Collaborative Arrangements in the Schiphol Airport Region

4.1.1 Regional Authorities governing Schiphol

The Regional Authorities governing Schiphol (Bestuurlijke Regiegroep Schiphol – BRS) is a collaboration between several public authorities in the Schiphol region in which 3 provinces and 43 municipalities are included (Appendix A). The main goal of the BRS is to represent the stakes of the region towards the national Government and the aviation sector when it comes to the development of Schiphol (Provincie Noord-Holland, n.d.).

While most represented public parties in the BRS are in the direct vicinity of the airport, the municipalities of Utrecht and Lelystad, and the province of Utrecht are also included. As the costs and benefits are divided unevenly over the municipalities in the Schiphol region, the involved parties sometimes struggle to formulate a common viewpoint. However, the general perception is that, despite the large amount of parties involved, the BRS functions quite well (Forster, 2013).

The most important role of the BRS is to represent the region in the Alders Table negotiations. Thus the BRS can rather be seen as a representative body than as a policy-making arrangement.

4.1.2 Schiphol Regional Consultative Committee

The Schiphol Regional Consultative Committee (Commissie Regional Overleg luchthaven Schiphol – CROS) is in place since the introduction of the new Aviation Act of 2003. Unlike the BRS, CROS is a collaboration between both public and private parties (Appendix A). CROS consists of the aviation sector (KLM, Schiphol Group, LVNL, Transavia and Martinair), three provinces (Noord-Holland, Zuid-Holland, Utrecht), municipalities and residents. Because of the large amount of involved stakeholders, CROS has chosen to divide the 26 involved municipalities into 8 clusters, which are all represented by one political and one resident representative (CROS, 2013).

CROS aims to optimise the use of the airport region by stimulating the development of Schiphol as a Mainport, while maintaining a pleasant living environment for the inhabitants of the Schiphol region. While the BRS is purely a consultative and representative body, CROS has more influence. The Committee gives requested and unrequested advice to the Ministry of Infrastructure and Environment regarding airport use forecasts and noise reduction measures (CROS, n.d.).

On average, the CROS meets four times a year. Preliminary to these meetings the aviation sector parties, the clustered municipalities and the clustered resident representatives meet up to formulate a common viewpoint (Forster, 2013).

Since 2012, Hans Alders, former Minister and Commissioner of the Queen of the province of Groningen has taken on the role of chairman of the CROS.

4.1.3 Alders Table

In 2006 The Alders Table (Alderstafel) was set up by the national Government after many discussions on the exceeding of noise limits and the lack of stakeholder involvement around Schiphol. It was named after its chairman, Hans Alders, who later on also took on the role of CROS-chairman.

Just like the CROS, the Alders Table is meant to balance the growth of Amsterdam Airport Schiphol, the reduction of noise and the liveability of Schiphol's surroundings. Similarly to CROS, in the Alders Table also representatives of regional and local municipalities, the aviation sector and resident representatives participate (Appendix A). However, compared to CROS, the Alders Table has political representatives from much less municipalities. On the other hand, the Alders Table has a larger amount of resident representatives, as next to the CROS resident representatives also residents from another joint platform of local residents (VGP) participate. Another difference is that in the Alders Table the Ministry of Infrastructure and Environment is actively represented.

Moreover, the Alders Table has a much more influential role in decision-making on the Schiphol file compared to the BRS or CROS (Forster, 2013). Participants in the Alders Table are allowed to discuss, negotiate and co-decide on policy proposals. Officially these proposals are only an advice for the national Government, but the proposals the Alders Table has made in the past have always been accepted point-to-point. In 2008 the Alders Table reached an advice on the development of Schiphol Airport up to 2020, which included a maximum amount of flight movements a year and was accepted by the Cabinet and Parliament into the national airport policy (Rijksoverheid, 2008).

In 2013 the Alders Table presented an advice on the implementation of the report of 2008 and a new noise measurement system. Next to that the Alders Table has made several proposals for regional and local projects focused on increasing the quality of the living environment in the Schiphol region.

With the presentation of two large advices on the growth of Schiphol and a new noise measuring system, the Alders Table has cleared the air on matters that were unresolved for a long time. Therefore the national Government has requested a reconsideration of the role of the Alders Table, which has led to the advice to merge the Alders Table and the CROS into one new collaborative platform: the Environmental Council (Omgevingsraad Schiphol – ORS). This ORS is to have a Meeting Place (Ontmoetingsplek) to inform and discuss issues and a Negotiating Table (Onderhandelingstafel) to advise the Cabinet (Alders & Verheijen, 2012).

These two functions mean that more or less the current division of tasks as in the CROS and the Alders Table will remain, only they will operate under one name. However, the exact interpretation of this newly to be set up body is yet undecided. The process of deciding on the parties to take seat in the Environmental Council, the number of times they will come together and the level of decisive power it will get is currently taking place and will be presented by Hans Alders in the beginning of 2014.

4.1.4 Governmental Forum Schiphol

In the late 1980s the Province of Noord-Holland, the cities of Amsterdam and Haarlemmermeer and Schiphol Airport decided to join forces on land-based developments in the surroundings of the airport by the establishment of the Governmental Forum Schiphol (Bestuursforum Schiphol – BFS) and a joint development company – the Schiphol Area Development Company (SADC). As the BFS itself has no legal jurisdiction, the policy the BFS sets out has to be adopted in the regional and local land use plans of the involved governments (van Wijk, Atzema, & Jacobs, forthcoming). This joining of forces was meant to make the region better capitalise on the benefits of airport proximity and to prevent fragmented development. Such an integral way of collaboratively looking at an airport region was relatively unique at that time in the Netherlands, but also internationally.

As a governance body the BFS is responsible for outlining the spatial-economic policy and attracting new firms to the Schiphol region (El Makhloufi, 2012). The BFS has already established several spatial-economic visions for the region. In the beginning this vision entailed a strict assessment of airport-relatedness of companies that wanted to settle in the airport vicinity. However, as the spatial economic planning in the Netherlands has shifted from restrictive towards a more development-enabling system, the airport-relatedness restriction around Schiphol was seen to be as too rigid. Therefore, the BFS has signed a covenant in 2011 that is much looser on the criterion of airport-relatedness towards companies that are interested in settling in the Schiphol area. Moreover, it lets the details regarding the assessment procedure up to the land owner and developer (van Wijk et al., forthcoming).

The BFS promotes a transition from Mainport to Metropolitan thinking, by actively stimulating the concepts of clustering and the Airport Corridor in its spatial-economic vision on the region for 2009-2030. An example of the relatively large scope the BFS considers can be seen in the map in Appendix B. Herewith it breaks with the usually quite local-oriented spatial planning practices.

However, the loosening of the airport-relatedness criterion, amongst other factors, has made the role of BFS smaller and made involved stakeholders doubt the necessity of BFS' existence. Therefore, it was decided in 2013 that the BFS will soon cease to exist. SADC, the implementing body of policy set out by BFS, will continue its work as a regional development company, however, not anymore under the umbrella of the BFS.

4.1.5 Amsterdam Airport Area

The Amsterdam Airport Area (AAA) is an association of both public as private partners, which is responsible for the international profiling and promotion of the Schiphol region. The two main goals of the AAA are to 1) serve as a public-private collaborative knowledge platform in the region, with a focus on real estate and area development, 2) retain established companies and attract new enterprises by the international profiling and promotion of the Schiphol region as a world-class business location (SADC, n.d.). As this is also a part of the tasks of SADC, SADC shares services with AAA for foreign marketing and sales of locations in the wider airport region (van Wijk, 2007). However, also other business locations participate in the AAA, such as Schiphol Real Estate which sells plots within the airport premises, and for example the Port of Amsterdam and locations in Aalsmeer and Almere. Moreover, several real estate developers and financial parties participate in the AAA-collaboration. However, by far not all business locations or developing companies in the region are partners of the AAA. Therewith a complicated variation in participation, ownership, management and marketing of locations in the Amsterdam metropolitan region has developed (van Wijk, 2007).

4.2 General Regional Collaborative Arrangements in the Greater Amsterdam Region

4.2.1 City region of Amsterdam and Amsterdam Metropolitan Area

The short history and tasks of the City region of Amsterdam (Stadsregio Amsterdam – SRA) and the Amsterdam Metropolitan Area (AMA) have already been introduced in Chapter 2.

As stated before, the scope of the SRA is much more limited, when it comes to the number of involved parties (Appendix A) but also when it comes to responsibilities. When we consider topics that also concern the airport area, only public transport and infrastructure is still regulated on a City region level, while all other topics are considered within the wider scope of the AMA. This is because for many regional challenges the geographical scale of the City region is perceived as too limited. For example, the city of Almere is an important location for newly to be developed housing to solve the pressure on the Amsterdam housing market. However, Almere has left the SRA collaboration as they found that the dominance of Amsterdam meant that the interests of Almere did not receive sufficient attention and they now only participate in the AMA. Moreover, other important spatial-economic entities such as the media cluster in Hilversum or the port of IJmuiden only participate in the AMA and not in the City region (Janssen-Jansen, 2011). Therefore large spatial regional collaborations such as Plabeka are initiated on the AMA level.

Another difference between the two governance bodies is that the AMA is based on voluntary participation, while the City region has a legal basis as it is one of the eight official city-regions appointed by Dutch government with regional governance tasks (Bontje, Musterd, & Pelzer, 2011). However, the current government has decided to abolish this type of formal regional collaborations and therefore the City region of Amsterdam will be abolished on the 1st of January of 2015. A regional transport authority will replace the most important responsibility of the City region.

4.2.2 Amsterdam Economic Board

The Amsterdam Economic Board (AEB) is a triple helix collaboration, in which representatives from governmental agencies, research institutes and the business world jointly work towards the strengthening of the economy of the Amsterdam Metropolitan Area. The AEB "strives to stimulate and support sustainable collaboration, innovation and growth in the region, and strengthen international

competitiveness" (I Amsterdam, n.d.)   Therefore the AEB formulates advices for the AMA, initiates projects and stimulates collaboration in the region by focusing on 7 economic clusters that are important or promising for the AMA: Creative industries, ICT & e-Science, Life Sciences & Health, Financial & Business Services, Logistics, Flowers & Food and Tourism & Conferences (Amsterdam Economic Board, n.d.).

The AEB consists of a Board, a project organisation and a large amount of partners (Appendix A).

4.3 Elaboration on Regional Governance in the AMA/Schiphol-region

The previous paragraphs have provided an introduction on eight collaborations in the AMA/Schiphol-region. The discussed collaborations are of very different natures, as some have a more representative or consultative task, while others have an advisory role or even policy-making abilities. As might become clear from the descriptions of the eight governance bodies and also when looking at Table 4, there are some redundancies in the governance system.

For example the BRS, CROS and the Alders Table are all three focused on similar topics. Some parties consider the doublings in the process tiresome, as in some cases one alderman has to discuss the same topics with residents, city councillors, in the BRS, at the CROS and at the Alders Table. At the end of 2011 even a whole cluster – Cluster North - left the CROS as they found it a waste of time and money, as the "real decisions were taken at the Alders Table anyway" (Forster, 2013).

The current opportunity for forum-shopping might be solved when the CROS and the Alders Table are replaced by one body, the Environmental Council. However, as it is still unclear how this Environmental Council will be organised, this is difficult to state upfront.

Another overlap in functions can be seen between the BFS and the AAA, as they are both interested in making the region attractive for international companies to settle in. While the BFS might be abolished soon, SADC will continue their work and therefore care must be taken that SADC and the AAA collaborate in a good and efficient way. Moreover, one could wonder why not more business locations in the AMA are added to the umbrella of the AAA, as now only a selection of locations is represented in this marketing collaboration.

Not only the BFS and AAA state regional attractiveness of the region as one of their main goals, this is also the case for the AMA and the AEB. However, while the AEB considers the full scope of the AMA, only a few of the municipalities of the AMA participate in it. Moreover, the municipality of Almere participates in the AEB, but also has its own economic development board (Economic Development Board Almere – EDBA).

As the City region has gradually lost several of its responsibilities throughout the years to the AMA-level, the replacement of the City region by a regional transport authority might be a logical step. Moreover, it is positive that transport will be officially regulated on an AMA-level. However, just like the changes in the CROS, Alders Table and the BFS it is unclear how these planned changes will work out in the future. On the one hand, the region is consciously rethinking its governance and trying to simplify the governance structure, on the other hand also new governance bodies are initiated such as the Environmental Council and the Transport Authority.

Finally, if one had to critically assess participation of the public parties in the governance arrangements, one could say that it does now always make sense which municipality, province or

Ministry is involved in which process. Sometimes neighbouring municipalities have very different degrees of participation in the various collaborative agreements. Appendix C gives an overview of the complexity of public participation in the governance bodies. There are almost 20 different configurations of collaborative bodies municipalities participate in. This means that if one municipality asks another in which collaborations they participate, the odds are around 5% that these are exactly similar to its own.

Figure 11 shows a visual representation of municipality involvement in the eight collaborative bodies. Even though there is some logic to the participation of municipalities in certain collaborations and the municipalities surrounding Schiphol are involved in most collaborative bodies, the question about why certain municipalities are involved so much more than others would definitely be legitimate. Just as the question why sometimes only the Province of Noord-Holland is involved, while at other times also the Province of Zuid-Holland and/or Flevoland and/or Utrecht participate.
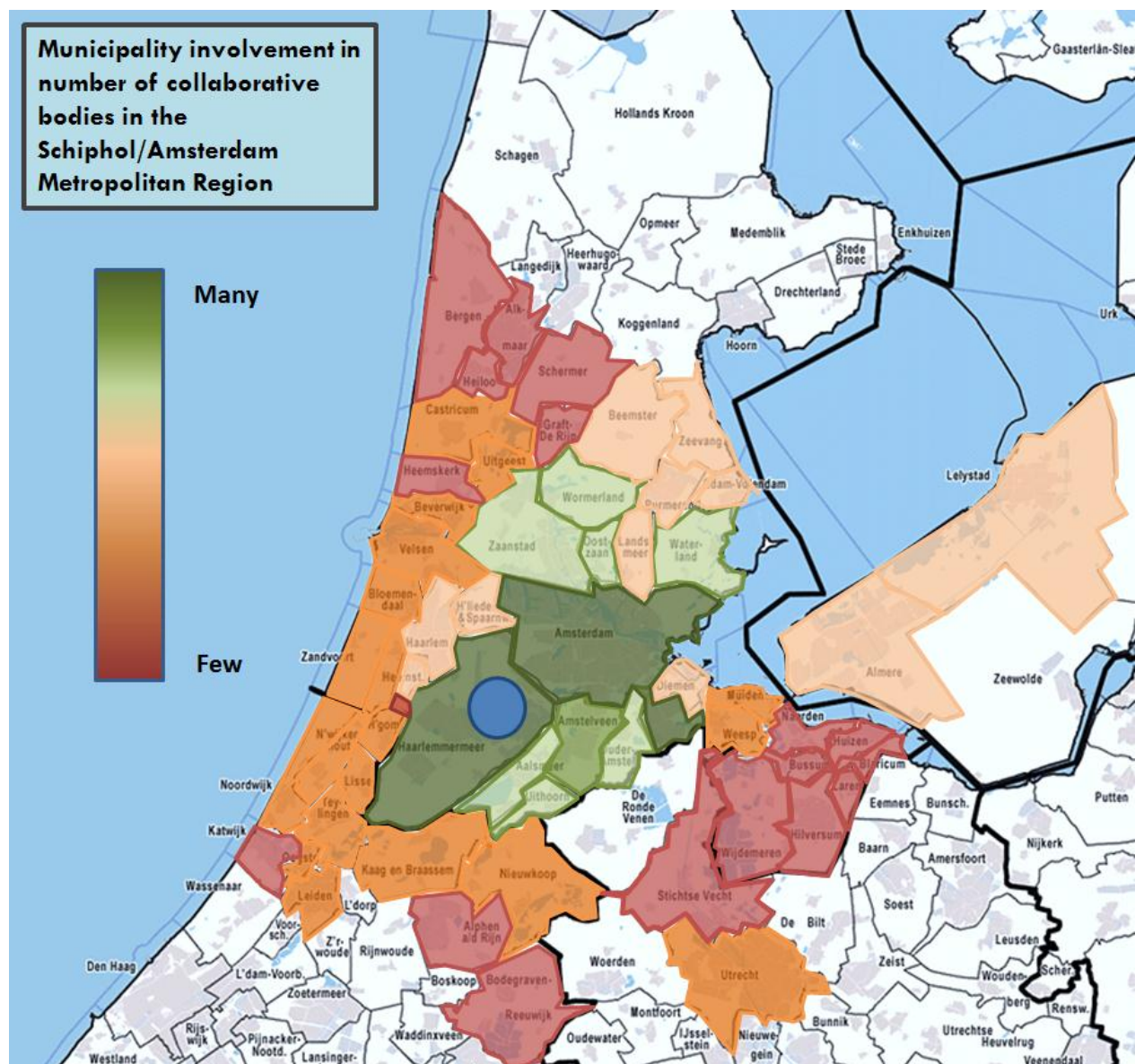
FIGURE 11: MUNICIPALITY INVOLVEMENT IN COLLABORATIVE BODIES

4.4 Conclusion on Current Governance in the Schiphol airport region

This chapter has introduced eight collaborative bodies in the Schiphol/Amsterdam metropolitan region and showed that currently redundancy exists on many interface themes. The region has also noticed this and therefore plans to abolish the City Region of Amsterdam, the BFS, the CROS and the Alders Table. However, two new arrangements will replace them: the Environmental Council and the regional Transport Authority. Whether these new collaborations will lead to a more efficient collaboration is yet unclear. Nevertheless, it is a good sign that actors in the region see the need for continuous adaptation of the governance to changing times and needs. Also several critical comments were made in this chapter about the haphazard involvement of public parties in the current eight collaborations that were discussed. Why exactly those parties are involved might come across quite random for an outsider of the process. Whether this is perceived as an issue in the Schiphol airport region is unclear. The next chapter will zoom in on issues that stakeholders and experts perceive in the region and compare these to the three known weaknesses of governance from literature, already briefly mentioned in Chapter 3.

5 DISCUSSION OF FIVE GOVERNANCE ISSUES PERCEIVED BY STAKEHOLDERS AND EXPERTS

This chapter discusses five issues that are perceived in the governance processes of the Schiphol airport region with the help of the transcripts of 18 stakeholder and expert interviews. Paragraph 5.1 answers the question whether the fragmentation and redundancy due to the large amount of collaborations is perceived as positive or rather as inefficient. Paragraph 5.2 and 5.4 discuss two other well-known governance issues from literature, while Paragraph 5.3 and 5.5 concern region-specific issues that have come to the fore from the interviews.

Chapter 3 has described the transfer from a more hierarchical-oriented government decision-making style to a network-based governance policy system. This chapter also mentioned that the shift from government to governance brings along many positive changes and is often better able to deal with complex systems, but a more network-oriented type of decision-making also knows several common points of criticism in literature.

Afterwards, in Chapter 4 current governance collaborations in the Schiphol airport region were described and shortly analysed. This analysis previously showed some redundancy in current processes and Paragraph 4.3 already questioned the public involvement in some of the collaborative bodies. However, as explained before, an important part of this research is the in-depth analysis of stakeholder's perceptions on the current governance structure. Therefore, this chapter looks further into issues in the current policy environment by comparing common governance issues from literature and analysing whether stakeholders in the region actually recognise this in the region.

To collect the view of a diverse range of actors on the governance issues in the Schiphol region 18 interviews were performed with several experts and stakeholders in the end of 2012 and beginning of 2013. In order for the interviewees to be able to talk freely about potentially sensitive topics, they have been promised anonymisation. An overview of the organisations they belong to can be found in Appendix D. The interviews were conducted in an unstructured way by mainly letting the interviewees speak about the governance issues they perceived themselves. When needed additional questions were asked.

This chapter starts by discussing the issue of inefficiency due to fragmentation and redundancy. Afterwards, four other governance issues are discussed. Two of these: 'a lack of democratic principles' and 'a need for hierarchy' are known issues of governance that are mentioned more often in governance literature and were already mentioned in Chapter 3. The two other issues: 'the lack of comprehensive decision-making on land use themes' and 'a general feeling of tension' are more specific for the Schiphol airport region and have come to the fore in the interviews.

5.1 Inefficiency Due to Fragmentation and Redundancy

In some regions in the Netherlands or abroad governments can sometimes try to prevent other parties from participating in policy-making. These governments are afraid of new types of partnerships, as they challenge the formal procedures based on the centrality of government and are incompatible with traditional hierarchical institutions of the past. Governance strategies require the exchange of information between actors and a willingness to look for solutions on a mutual basis. Many governments recognise this need for cooperation, but are not willing to take the consequences. As people often cherish the clear borders between the public and private sector, they tend to be on their guard with respect to more complex governance arrangements (Teisman & Klijn, 2002).This tendency

is, however, not strongly to be recognised in the Schiphol airport region. On the contrary, governments have allowed or even initiated a large amount of collaborative platforms, often with overlapping functions and members.

As discussed in the introduction, such an extensive network of governance arrangements is characterised by fragmentation and redundancy. This does not necessarily have to be a bad thing. However, it can lead to a lack of efficiency and the involvement of many actors from governments, businesses and civil society is therefore often associated with negative terms of administrative fuss, fragmentation, or meaningless compromises (Termeer et al., 2010).

Several authors mention that the negotiations and participations that are so typical for the governance approach do not automatically lead to more efficient modes of decision making. On the contrary, the time-intensive consultation and participation can increase costs due to suboptimal use of public finance and misallocations (Nuissl & Heinrichs, 2011). Moreover, the transaction costs of coordinating multiple actors at multiple levels can become higher than the scale-flexibility advantages (Termeer et al., 2010).

Do stakeholders and experts perceive inefficiencies in the current governance processes?

Literature acknowledges that a large network of governance arrangements can have negative effects, such as inefficiency, but does not provide definitive answers to conclude whether this is also the case in the Schiphol airport region. Therefore, the interview transcripts are analysed to perceive the opinion of the respondents on this topic. This leads to the conclusion that most interviewed stakeholders and experts acknowledge more negative consequences of the fragmentation and redundancy than possible positive effects.

Only in one interview it is mentioned that the large amount of consultative bodies is not necessarily an unwanted thing. Each body has its own role and it is impossible having to discuss every issue on an AMA level with over 30 municipalities, states Interview M. Interview G somewhat agrees that initiating new discussion platforms is not bad, as new dynamics are necessary. However, the interviewee explicitly states, old platforms also need to be deleted, otherwise too much administrative complexity occurs. Interviewee D on the other hand states that we should stop designing new governance arrangements. We should rather focus on improving the current model and to continue showing the importance of the current arrangements to the involved administrators.

Respondent O is an insider in many of the governance processes and also very critical about the large amount of collaborative agreements. "There are so many initiatives such as Amsterdam Connecting Trade, the Amsterdam Logistics Board, the Amsterdam Airport Area, Amsterdam InBusiness, Smart Logistics Amsterdam, Seamless Connections and so on, but how they interact and who takes responsibility for what is often unclear."

Possibly a part of this expressed dissatisfaction with the large amount of governance arrangements that are currently in place can be explained not necessarily by the quantity of these arrangements, but by the discontent about the quality of the current processes and the outcomes of these decision-making processes.

The interviews seem to confirm this, by putting forward criticism on several collaborative arrangements. In some interviews specific governance bodies are named that are obsolete and can be eliminated. "After the Environmental Council is in place, the BRS is not necessary anymore, and probably the BFS either", states Interview R. "Why does Almere have its own Economic Board, when they are already

part of the Amsterdam Economic Board," questions Interviewee M. The most often criticised collaborative body amongst the 18 respondents is the Governmental Forum Schiphol (Bestuursforum Schiphol – BFS). Several mentioned points of criticism were that the BFS:

▪ acts in an isolated way in the AMA (Interview A) and lacks a connection with the national Government (Interview C);
▪ is suffering from a weakness of management due to the lack of interest of the involved administrators (Interview B);
▪ works with an outdated agenda (Interview C);
▪ and does not function well due to the tensions between Amsterdam and Schiphol/Haarlemmermeer.

Numerous interviewees agreed on the plans for the abolition of the BFS. Interview G noted that because many regional topics are now addressed through new collaborations such as the Amsterdam Economic Board and Plabeka, the BFS has become unnecessary. In Interview I it was mentioned that there is just not enough energy left amongst administrators to continue with the BFS. Interviewee A uses the most extreme wording: "The BFS has outlived itself and should be eliminated as soon as possible."

As discussed in Chapter 3, a crazy-quilt pattern of different governance arrangements is inherent to a non-hierarchical decision-making system and should not necessarily form a problem. However, what becomes clear from the overview of the interviews in this paragraph is that many of the respondents do perceive the overlap in the governance arrangements as an issue. Moreover, the respondents criticise not only the quantity of the collaborative bodies, also the quality of several of the collaborations is questioned. One of the qualities that can often be lacking in policy-making through governance arrangements is a democratic base for the decisions.

5.2 Lack of Democratic Principles

By transferring social decision competence away from the formal, constrained government arenas towards the private sectors and civil society, the democratic principles of representation, legitimacy, and reliability can be violated by a governance approach of decision-making (Nuissl & Heinrichs, 2011). One would think that a greater role of civil society in decision-making processes would lead to a better representation as more people are given a voice. However, literature underpins that participatory practices might in effect have discriminatory rather than integrative effects (Nuissl & Heinrichs, 2011). Governance will always go beyond the control of elected politicians or state executives and therewith be located in somewhat of an institutional void. These blurred lines between public and private can be seen as a threat to democratic legitimacy (Hajer et al., 2004). Moreover, as bargaining processes do not always follow clear prescribed rules, decision-making processes in governance arrangements can lack in transparency (Termeer et al., 2010). Institutionalised forms of governance have often safeguarded democratic legitimacy by law, either directly or through members who occupy elected local authority positions within the region. However, less formalised forms of governance arrangements often lack these democratic principles (Levelt & Janssen-Jansen, 2013).

Do stakeholders and experts perceive a lack of democratic principles in the current governance processes?

The lack of democratic principles is also partly recognised by the respondents in the Schiphol airport region. In two interviews distrust towards the democratic legitimacy of decisions made in the region is raised (Interview G, Interview I). These respondents declare that there is a large lack of checks and

balances in the Schiphol development file. If Schiphol wants something, they will go directly to the national Government without regional consultation, which makes regional agreements of no use, so they state.

Also many interviews mention that regularly public and private goals and roles are not separated well. As we have seen already, the airport region can be characterised by many public-private collaborations and public companies, as well as by public actors that have economic interests. "The friction between the roles of the public versus the private parties has never been solved. Many public parties are involved in for example the land market, which is mainly based around economic values, "expresses Interviewee E.

Some experts have doubts about the power of Schiphol in the region. Interviewee J declares: "The commercial and the public functions of Schiphol are too much intertwined." Interview G agrees with this: "Schiphol has too dominant of a role in many policy discussions and does not always have in mind the liveability of its surrounding area."

Also the Schiphol Area Development Company (SADC) does not have an undisputed role when it comes to separation of public and private tasks. SADC sells land for the development of commercial properties in the Amsterdam Metropolitan Area, mainly in the Schiphol region. The company has four shareholders which all own 25% of the company: the municipality of Haarlemmermeer, the municipality of Amsterdam, the Province of Noord-Holland and the Schiphol Group. This means that it is a public company with both commercial as social responsibilities. However, some people doubt that SADC is able to balance these two roles in a legitimate way. "SADC is often perceived to have an improper and favoured role as a developer in this region," is stated by Interviewee Q.

SADC has been looking for ways to reinvent their role in the Schiphol region several times before already. Many of the interviewed experts agree that with the current economic situation on the area development market, now is a time to reconsider the role of SADC once more. "SADC should be realistic, devaluate projects and stop certain project teams," Interviewee B states. While in the past the discussions in area development were about the division of the profits, currently the difficulty is in the division of the risks and losses. Schiphol is deliberately transferring risks to SADC, but two of its shareholders – Amsterdam and the Province of Noord-Holland – often complain that the current risks are too big. This makes the repositioning of SADC important, is the view of interviewee O. While some parties are in favour of limiting the dominant role of SADC in the airport region, others see opportunities for SADC to grow into a more encompassing and connecting role in the airport region. In Interview P it is even proposed that SADC moves on from an area development role into a function of "connecting parties, promoting sustainability, economic networks, triple helix collaboration et cetera".

SADC operates under the umbrella of the BFS, which is responsible for the outline of the spatial-economic policy and attracting new firms to the Schiphol region (El Makhloufi, 2012). However, as explained earlier, the BFS will soon cease to exist and Interview I expresses doubts about the position of SADC when this happens. He is afraid that in that case it is unclear whether SADC will be controlled and whether they will be able to keep separating their public and private tasks.

This expressed discontent with the current role of SADC is in line with the other criticism regarding the governance of land use interfaces in the airport region.

5.3 Lack of Comprehensive Decision-Making on Land Use Themes

Of the five previously defined interface themes in Chapter 3 decision-making on land use was by far most disputed amongst the 18 interview respondents. Collaboration on land use is often difficult for municipalities, as they have high stakes in possible land use profits from construction of dwellings or office locations.

Many experts agree that the shift towards a comprehensive metropolitan land use planning would be a good one for the Schiphol region. "The metropolitan level is the right one to discuss Schiphol issues: Haarlemmermeer is too small and Amsterdam keeps too much distance," affirms Interviewee J. Also Interview M shows a proponent of the Amsterdam Metropolitan Area, which should replace the City Region of Amsterdam (SRA).

Interview G also mentions that "regional development and land use policy is one of the Schiphol-related topics that can benefit most from regional collaboration." Interviewee J agrees that the Schiphol airport region can also benefit from upscaling land use topics: "The Schiphol file will for sure not be forgotten on the metropolitan level, Schiphol is too important for that."

Several respondents express that when one currently looks at the spatial plans for the Schiphol airport region, one will see a patchwork of zoning plans and structural visions, which are all hardly integrated. Not only do experts speak of a lack of integration in the spatial visions, the spatial visions are also not connected well to the airside developments of the airport. "There is hardly a connection between the landside and airside dossiers," interview D claims. Interviewee F criticises politicians, which are also not able to integrate airside and landside well. He has noticed that some aldermen participate in debates on both topics, but when they are discussing landside developments, they just don't mention airside aspects and vice versa.

"There is no common spatial regional agenda", states Interview O, "the Logistieke Westas was an attempt to achieve this, but it lacks a regional framework." Another attempt to create a common spatial agenda was SMASH, but the outcomes of SMASH are seen as disappointing by many. "The starting point of SMASH was the traditional dilemma of economy vs. environment and therefore the integration of Schiphol in the Amsterdam Metropolitan Area unfortunately has not been a focus in it," states Interviewee H. Interview R also mentions the limited scope of SMASH, many important issues such as safety and sustainability are underexposed, he states.

Furthermore, the interviews mention that often too select of a group is invited to decision-making processes on land use. SMASH consisted only from administrators and the aviation sector, with no involvement of other parties. This makes the SMASH vision way too limited (Interview R). Additionally, because so many processes are running in parallel, they often do not integrate each other or on the contrary, take some plans for granted that have not officially been decided on. For example, SMASH took the agreements made at the Alders Table and in Plabeka for granted, which was a sensitive point for many regional parties, which felt that the outcome of the SMASH processes was already fixed from the beginning (Interview H).

The outcomes of Plabeka, also an attempt to collaborate on spatial issues in the region, are also not perceived positively by all experts. Some state that agreements such as Plabeka can only take place after an extreme situation such as a record in office vacancy, otherwise regional collaboration on land use topics will not naturally arise in the Schiphol region (Interview Q). Moreover, "the results of

Plabeka are not useful, as it has used a too positive scenario and has not taken into account the large decreases in population growth, economic growth and investments," states interview B.

Moreover, often after plans such as SMASH and Plabeka are made, there is no political urgency or money to come to actual decisions (Interview C). Several of the interviews recognise this issue in the Schiphol airport region and mention that regional agreements such as Plabeka or SMASH are badly implemented into local policies. This is a common governance issue that is mainly applicable to governance arrangements that are of an informal nature and do not have any instruments to actually implement the policy they have negotiated on. Often a policy that seems to be good and feasible for the collection of parties as a whole will not be accepted or feasible at the level of the individual stakeholders. At these individual organisations other political and cultural contexts might be important and the goals of the individual stakeholder might differ dramatically from the common goal. If the governance body relies on voluntary action of all stakeholders for the implementation of policy, the decisions taken in the governance arrangement might never become effective (Levelt & Janssen-Jansen, 2013). This is exactly what interview O means when he mentions that the region is very active in pursuing a large amount of collaborative agreements, but even though there is regional support, when push comes to shove none of the parties actually takes on these projects and agreements.

As pointed out by this paragraph, next to the two general expressed governance issues of inefficiency and lack of democratic principles, specifically the governance arrangements that concern land use are often criticised. A logical response to the criticism of the current governance arrangements is the desire for more hierarchical types of policy-making.

5.4 Need for Hierarchy

Even though collaborative decision-making is an intrinsic characteristic of governance, often parties still seek for an actor who will rule the roost when times get tough. Several authors indicate that the ability to compromise and come to joint decisions often only flourishes in the shadow of hierarchy (Nuissl & Heinrichs, 2011). This would suggest that a policy system that purely consists of governance bodies without any form of hierarchical institutions can never be effective.

Do stakeholders and experts perceive a need for hierarchy in the current governance processes?

The need for a more active leadership role in the Schiphol airport region is also strongly expressed in the interviews. A quite often mentioned problem by the respondents is exactly the lack of this leadership.

A solution would be to formalise the collaborations on the Amsterdam Metropolitan Area-level and give that collaborative body instruments to implement policy. However, whether the Amsterdam Metropolitan Area should be institutionalised, in what form and with which common goals remains a topic of disagreement, also amongst experts and stakeholders.

Interviewee A states that the main purpose of the AMA is to make clear what the region wants from the bottom-up and to communicate this to the national Government.

A governance shift to the AMA level does not have to mean more complexity, thinks the expert in interview G, if Schiphol is seen as one – if not the most important – player in the region.
Interview A and B on the other hand both stress the importance of the informality of the AMA. "The AMA has been successful as an informal network the last decade and has made the gap between the

city and the surrounding region smaller," mentions Interviewee A. Interviewee B agrees: "The main strength of the AMA is that is about informal networks, things will go wrong if it will all be formalised."

With no institutionalised regional government, the two traditional actors who are hierarchically entitled to take the lead when it comes to regional issues would be the Province and the National Government. However, both these parties receive much criticism from the stakeholders and experts.

5.4.1 Need for a more active role by the national Government

Most experts and stakeholders stress the need for a more active national Government. They see that the Government is delegating more tasks to lower levels through regional collaborations such as the Alders Table (Interview M), but see this as a bad development. Many interviewees agree that the Alders Table has brought some much needed agreements and therewith peace concerning the development of the air traffic and noise issues. However, some experts are of opinion that the Alders Table has focused too much on noise, forgetting to take into account ecological issues and therewith not weighing the interests in an integral way (Interview N). Interview R mentions a wrong power balance within the Alders Table, as 90% of the power lies with the inhabitants, he states, the BRS almost does not have a say at all. Another interviewee expresses the fear of the power imbalance of the Alders Table towards the outside world. "The Alders Table has become too institutionalised and has too much power now; no civil servant dares to disagree with Alders" (Interview F).

Several respondents believe that only a more active role by the national Government could prevent such malfunctioning of regional collaborations. "The Government should stop following Schiphol and take on a more directing function," according to Interviewee J. Interview R believes in an active role of the Government because he does not have faith in the judgment of municipalities, which "only have building profits in mind."

The perceived problems are not only with the general role of the national Government, but also more specifically with the two ministries that are most related to Schiphol-issues, the Ministry of Infrastructure and Environment (I&E) and the Ministry of Economic Affairs.

Because of the high staff turnover at the ministries, Interviewee L believes that the knowledge about Schiphol at the national level is slowly seeping away. The Ministry of Economic Affairs hardly plays a role when it comes to the Schiphol file, states Interview E, and also I&E is often invisible. However, "a strong role of the national Government is essential as a binding element and to underline the urgency", he states. The interviews are not only critical about the vision of the national Government on Schiphol, also within every ministry there is not one common view, as stated by interview F: "Just look at I&E, where the landside-team perceives the Mainport from a metropolitan perspective, while the airside-team is viewing the airport in a completely different way."

Of all the interviews, there is just one expert that does not want more national involvement. "The national Government should not interfere with Schiphol, as long as the national interest is not at stake," states Interview Q. "The region can organise things like noise norms, flight times and development of locations themselves. We have enough checks and balances and blocking power in the Netherlands to make sure that this is possible."

5.4.2 Need for a more active role by the Province

The need for more hierarchical intervention by the Province is a less mentioned problem than the need for a more active role by the national Government. However, several actors are unsatisfied with the

behaviour of the Province of Noord-Holland. Some of the mentioned weak points are that the Province:

- Lacks in decisive power (Interview G; Interview C);
- Is too hierarchical (Interview G);
- Has weak administrators (Interview C);
- Is too afraid to take decisions because of several political affairs in the past (Interview G);
- Is in turmoil and displays impotence and ignorance, especially since the report of the Vriesman committee (Interview B).

Interviewee I states that the Province is supposed to have a regional coordinating role, but cannot put this into practice with strong municipalities like Amsterdam and Haarlemmermeer. Interview C is of the same opinion and suggests that things might become better if Amsterdam would take the lead.

Whether a possible merger of the three Provinces of Noord-Holland, Utrecht and Flevoland into one 'Superprovince', a proposal that the National Government presented two years ago, can make a difference in the influence of the Province is questionable. "Neither the Provinces nor other parties are enthusiastic about the possible merger of Provinces," states Interview I.

Hence, on the one hand many of the respondents express the need for more hierarchy, while on the other hand they do not agree whether this should be done by formalisation of metropolitan governance. Moreover, the roles of the Province and the national Government are not undisputed. This disagreement between stakeholders is further analysed in Chapter 7.

A final issue that was expressed in some of the interviews and is worthwhile mentioning is a general feeling of tension in the policy-making arena in the Schiphol airport region. Such tensions due to past conflicts or future uncertainties can have a large influence on how actors behave and therewith policy outcomes or lack of these outcomes.

5.5 General Feeling of Tension

Many of the interviewed people express criticism on the current collaborative atmosphere in the region due to certain tensions. These tensions are a result of both internal as external influences, some in the past and some still ongoing. They have given decision-making in the Schiphol airport region a negative image due to which the Schiphol file is often seen as a pain in the neck.

In two interviews the connection between collaboration and the economic situation is made. Interviewee N states that in times of fast economic development in the end of the '80s Schiphol started to see their surroundings as enemies, which has caused a neglected relationship between the airport and its surrounding farmers and inhabitants. Interview B looks at it from another perspective. In times of growth regional collaboration was much easier, he states, now the need for regional collaboration is much bigger but politicians withdraw into their own local problems. Interviewee Q is also sceptical about the collaborative capability of the region. "The region will only collaborate and achieve results when the collective need is highest. It is not to be expected that natural, pro-active coalitions will occur."

Several stakeholders have historically had a difficult relationship, such as Schiphol and the surrounding inhabitants, KLM and Schiphol, Amsterdam and Haarlemmermeer. However, some respondents argue

that the uncertain economic climate has increased the pressure on the stakeholders and therewith on their relationships.

One of the large uncertainties that are casting a shadow over all the debates on Schiphol is whether or not Schiphol will retain its hub status in the future. "The position of Schiphol as a hub airport is under pressure, because there are increasingly more direct connections and the low cost carriers have better business models than the traditional airlines," is the view of Interviewee D. In Interview G the same fear is expressed: "KLM leaving to Paris is one of the enormous risks we are facing." Interview L is correspondingly of the same opinion: "The position of KLM and its network is not self-evident; there is a relatively large market position compared to the size of the hinterland."

A second unsure factor is in international aviation politics. In Interview K a very deterministic view is expressed that it is of no use to talk about governance in the Schiphol region. Important decisions are taken in Qatar and Dubai anyway, so the interviewee states. Interviewee L also expresses the irrelevance of the politics in Den Haag, "Brussel has become more important when it comes to aviation policy and new destinations."

Another issue that adds to feeling of tension and will always prevent stakeholders from completely clearing the air on Schiphol-file is the question about how much more the airport can and will grow. Even though agreements are made on this topic, these agreements are undermined by for example the reservation by the national Government of land for a possible extra runway ('parallelle Kaagbaan') in the future. Some stakeholders see Schiphol as a money-hungry machine that is only interested in expansion. "Schiphol is stuck in a circular argument: as we already invested so much, we have to keep growing," complains Interviewee K. Also in Interview C a distrust towards Schiphol is expressed: "even though the national Government might see the possible future new runway as an environmentally better solution for certain current issues, Schiphol is mainly counting on capacity growth. They will never invest billions just for the environment.

5.6 Conclusion on Perceived Issues

This chapter has shown an extraction of five issues from 18 interviews that were held with experts and stakeholders in the Schiphol airport region. The most important conclusion is that while redundancy and fragmentation in policy-making does not necessarily have to have negative effects, many of the interviewed respondents are of the opinion that this overlap of responsibilities in the Schiphol airport region does lead to inefficiencies in the decision-making processes.

The respondents, however, do not only recognise inefficiency issues due to the large quantity of collaborative bodies, they are also of the opinion that some arrangements are obsolete (e.g. the BFS) or should rethink their current role (e.g. SADC). Moreover, there are often weak connections between the different governments and governance bodies, due to which a common vision is lacking. The respondents recognise this most evidently when it comes to land use and spatial planning. Two recent initiatives to come to a more comprehensive regional vision: SMASH and Plabeka, are seen as disappointing due to their limited scope and due to their lack of implementation power. Moreover, these collaborations have not always involved the right parties to come to outcomes. This lack of transparency and democratic principles is also recognised in other regional collaborations. The lack of transparency contributes to the already existing tensions that have given the Schiphol-file a reputation of pain in the neck.

However, in the 18 interviews very mixed responses can be observed when it comes to how the inefficiency and other issues with regional governance should be approached. While many of the respondents express the need for more hierarchy, they do not agree whether this should be done by formalisation of metropolitan governance. Moreover, it is still unclear how much the Province and national Government are able to and should take on a more active role in regional decisions.

While this qualitative information and enumeration of issues already gives us an interesting overview of stakeholder views, it does not give us much guidance if we want to draw conclusions on which issues are perceived to be the most important and in which direction to seek for improvements. Especially as many of the issues recognised by the stakeholders and experts are inherent to a network-oriented governance approach and it is therefore questionable whether they can be completely resolved.

Moreover, the 18 interviews only represent a small part of involved stakeholders in the region. Therefore, the next chapter goes more in-depth into a wider range of stakeholder perspectives. By asking stakeholders to prioritise issues, the expectation is to find out what kind of perspectives exist when it comes to the governance of the Schiphol region, which stakeholders have similar viewpoints and where the largest differences exist. This knowledge will then lead to recommendations for opportunities for improvements of the current situation.

6 QUANTIFYING STAKEHOLDER PERSPECTIVES WITH THE Q-METHODOLOGY

This chapter describes the exploration of the stakeholder perspectives on the governance of the Schiphol airport region using Q-methodology. Firstly, this chapter elaborates on the theory behind Q-methodology and its use for this specific topic in Paragraph 6.1. Also several other Q-methodological researches with a focus on Amsterdam Airport Schiphol are discussed in Paragraph 6.2. After this, Paragraph 6.3 presents the Q-sorting approach and procedure that were used for this specific research.

The previous chapter has given an overview of several perceived issues on the governance of the Schiphol airport region. While the information from these qualitative interviews gives us interesting insights, it is expected that quantifying the perspectives of stakeholders can provide even more interesting input for policy analysis. Getting more insights in stakeholders perceptions is one of the first steps in the process of problem solving, given the mutual interdependencies in our network society (van Boxtel & Huys, 2005).

However, because of the many involved stakeholders, conflicts of values and an infinite amount of policy options, the issues that play a role In the Schiphol airport region are ill-structured or wicked problems (Dunn, 1981)(Rittel & Webber, 1984).

The complexity of this multi-actor policy setting is not only because of the different interests of the actors, but also due to their different perception of reality (van de Riet, 2003). Every actor has a frame of reference with a coherent set of beliefs and attitudes which it uses to observe and give meaning to reality. Such an individual policy discourse serves as a filter through which an actor observes the world, attributes meaning to it and acts on it (Kroesen & Bröer, 2009). Consequently, the way actors perceive the policy context is one of the determining factors in the roles the actors play and their strategic behaviour (Teisman, 2001).
The actors' frames are the base for the selection of strategies and evaluation of possible outcomes. Therewith the perceptions determine the direction in which the solution is sought (van Boxtel & Huys, 2005).
However, stakeholders are often unaware of their own and each other's perspectives, especially in the case of unstructured problems (Cuppen, 2012). A better view on the different frames of reference will take away some of the unpredictability of the strategic behaviour of the involved actors (Koppenjan & Klijn, 2004). Only after parties are aware of the different perspectives, the real substantial questions can be answered (van Boxtel & Huys, 2005).

Moreover, when the stakeholder perspectives are known, policy makers can frame the problem analysis and solutions to match these perspectives, increasing the chance that stakeholder will be receptive to the results (de Bruijn & ten Heuvelhof, 2002).

Therefore, this chapter presents an extensive analysis of the main policy frames present amongst the actors described in the previous chapter, concerning the governance of the Schiphol airport region. This analysis is performed with the help of the Q-methodology, first introduced by William Stephenson in 1935. The Q-methodology is an evolvement from factor analytic theory, invented by Stephenson in order to extract actor subjectivity (Brown, 1997). The Q-methodology gives insight into the perspectives of different stakeholders towards a certain issue (Brown, 1980).

The use of this method was proposed by the Better Airport Regions governance research team, which also performed the 18 preparatory interviews that were used in the previous chapter. This team

believed that the Q-methodology could possibly provide interesting results in this project. Therefore, they arranged appointments with respondents, held Q-methodological interviews and recorded the data. This data was also made available for use in this report.

6.1 Added Value of Q-methodology

When performing a Q-methodological study a group of respondents, the P-set, are asked to rank-order a Q-set of statements from their individual point of view, mostly using a quasi-normal distribution (van Exel & de Graaf, 2005). The Q-methodology builds on the idea that meaning is relational, therefore, the statements are evaluated and rank-ordered in relation to each other. This means that each statement cannot be seen in isolation but derives its meaning from its relation to other statements (Kroesen & Bröer, 2009). So while Chapter 5 provided us with an enumeration of issues by stakeholders, the Q-methodology is expected to bring the analysis a step further by unravelling the priorities amongst the stakeholders.

It is often said that Q-methodology bridges the gap between quantitative and qualitative research and combines the strengths of both these research traditions (Brown, 1996).

In contrast to many other R-based surveying techniques, Q-methodology is not interested in estimating population statistics and in making claims about the percentage of people expressing a certain view. In the contrary, Q-methodology aims to sample the range and diversity of views expressed (Kitzinger, 1987). As a result, a big advantage of the use of Q-methodology is that it does not require a large number of respondents. This makes the method particularly appropriate for complex environments such as the Schiphol region. Collecting the specific viewpoints of all involved stakeholders in the region would be an impossible task. The Q-method provides an interesting alternative, as it gives a good general overview of possible perspectives on a topic. Q-methodology correlates personal profiles and gives information about similarities and differences in viewpoint on a particular subject (van Exel & de Graaf, 2005). Each revealed factor in Q-methodology will potentially identify a group of persons who seem to be of a similar type and share a similar perspective about a particular topic (Watts & Stenner, 2012).

The Q-method can therefore provide an in-depth understanding of policy issues, as it offers analysts insights and understanding that can assist them in their analytic task (Durning, 1999).

An often-occurring problem about policy analysis is that the framing of the issue at the beginning has a direct influence on the analysis and the to be considered alternatives. Q-methodology is, however, able to expose the positions that stakeholders really hold, without having to accept predefined categories by analysts or decision makers (van Eeten, 2001). Rather than using categories that the investigator imposed on the responses, Q-methodology determines categories that are operant, i.e. that represent functional rather than merely logical distinctions (van Exel & de Graaf, 2005).

Van Eeten (2001) has demonstrated that Q-methodology can add value by recasting highly intractable controversies, which are less suited for traditional policy analysis methods. Analysing different perspectives to a problem can help to reframe an issue by adding more dimensions to it and therewith increasing the room for solution (de Bruijn & ten Heuvelhof, 2002).

6.2 Previous Research on Schiphol Using Q-methodology

As mentioned earlier, Q-methodology is not an unexplored approach when it comes to the case of Amsterdam Airport Schiphol. This paragraph will discuss three examples of applications of the Q-methodology on stakeholders in the Schiphol airport region.

A well-known previous Q-methodological research on Schiphol was performed by Michel van Eeten in the end of the 20th century. On behalf of three Dutch ministries van Eeten (1999) performed this research with 38 stakeholders in the airport area. The decision to expand the airport in 1995 was preceded by heavy debates on the necessity of a fifth runway and divided the stakeholder arena into proponents and opponents of further growth, a reproduction of the well-known economy versus environment trade-off. This led to a persisting dialogue of the deaf, characterised by parties talking past each other, ritually repeating arguments. Van Eeten applied the Q-methodology to closer examine the wealth of different positions concerning the development of Schiphol in order to move past the clear-cut dichotomy that was dominating the policy discourse (van Eeten, 1999). Van Eeten's research led to the definition of five factors, of which just two reflected the polarisation for or against further aviation growth and infrastructure expansion. The other three policy arguments van Eeten discovered were: (1) societal integration of a growing airport, (2) ecological modernisation of the aviation sector and (3) sustainable solutions to a growing demand for mobility. Of the 38 respondents, 13 had more affinity with one of these three other factors, which indicated that for them the way how proposals were treated was more important than the actual expansion decision. Van Eeten concluded therefore that there was a need for a new agenda that would present stakeholders and researchers with a richer set of alternatives. He argued that linking more issues to the Schiphol expansion debate would enrich the discussion and redefine it into a more tractable problem in which decision-makers could intervene in real and important ways (van Eeten, 2001).

Van Eeten's conclusions are in line with the theory on process management by de Bruin and ten Heuvelhof (de Bruijn & ten Heuvelhof, 2008). De Bruin and ten Heuvelhof also underline the importance of a multi-issue agenda in multi-actor decision-making processes. The more problems and solutions that are being discussed, the easier it is to couple and decouple them and make a package deal. This will prevent a one-issue, yes/no situation which hampers good and efficient decision making in a network (de Bruijn & ten Heuvelhof, 2008).

Ten years later Kroesen, Huys and Stallen (2009) used the study of van Eeten as a reference point for their Q-methodological research. While van Eeten's study concerned the general arguments on the future development of Amsterdam Airport Schiphol, Kroesen, Huys and Stallen focused specifically on noise policy and stakeholder views on it, considering non-acoustical factors. A decade after the study of van Eeten also this research revealed the dichotomy between the pro-growth versus the anti-growth perspectives. Moreover, Kroesen, Huys and Stallen (2009) argued that because of the strong economy versus environment problem framing by the central government there was no room for the formulation of individual preferences. All other policy arguments would be moulded to fit and strengthen the existing controversy.

A third example of a Q-methodological research in the Schiphol airport region was performed earlier in 2013 on 12 stakeholders by Ferrie Förster. Förster (2013) analysed the perspectives of these stakeholders, focusing on current interactive policy processes and more specifically the CROS and Alders Table governance arrangements. Similarly to van Eeten's research, Förster found the pro-growth and anti-growth perspectives, as well as three other views on the current policy process. To a certain extent the results by Förster are quite consistent with the other two previously discussed

researches and confirm the levels of disagreement. However, next to the old discussion on further growth of the airport, Förster finds another large source of disagreement amongst stakeholders, mainly on the responsibility of spatial planning and housing construction.

These three previous cases in which Q-methodology was used on the case of policy issues regarding Amsterdam Airport Schiphol illustrate that the method is appropriate to apply on similar cases and can generate interesting results. The Q-methodological research presented in this report, however, has a broader scope as it captures views on a range of interface topic as well as the views on the governance of these interfaces.

6.3 Approach

Performing a Q-methodological study involves a few general steps (Figure 12).
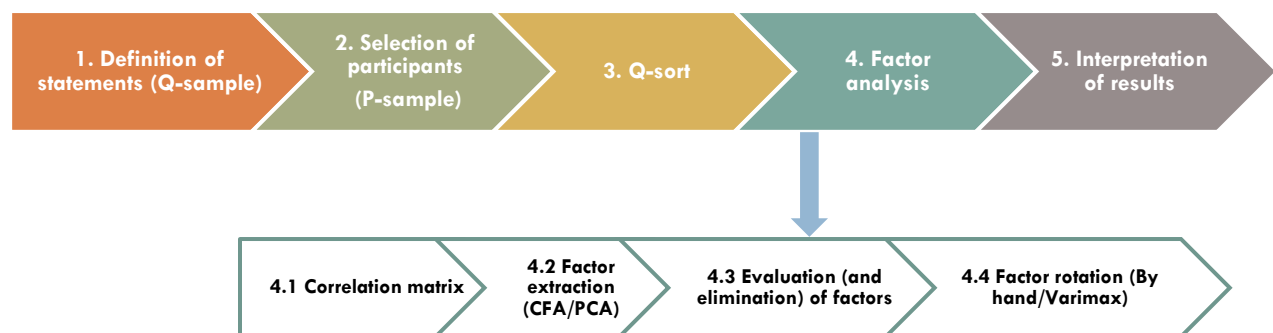
FIGURE 12: STEPS OF A Q-METHODOLOGICAL STUDY

Even though the order of these steps is quite fixed, the process can still be of an iterative nature. During the interpretation of the results after Varimax rotation it can for example occur that more understanding is created of the viewpoints and it can become interesting to additionally rotate the factors by hand. In addition, it can also happen that during factor interpretation one of the already weak factors is difficult to interpret and therefore is eliminated from the analysis.

STEP 1: DEFINITION OF STATEMENTS FOR Q-SAMPLE

The first step to performing a Q-methodological research is the definition of the Q-sample, a collection of statements of opinion amongst stakeholders on a certain topic, also known as the concourse (van Exel & de Graaf, 2005). Initially an overly large number of items is generated, which can then be refined and reduced through processes of piloting (Watts & Stenner, 2012).

Watts and Stenner (2012) name two criteria for an effective Q-sample: coverage and balance. Firstly, they state that the selected statements must provide good coverage in relation to the research question. They must be broadly representative of the opinion domain. Moreover, each individual statement must have its own original contribution to the Q-sample, so that all items sit nearly side by side without creating unsightly gaps or redundant overlaps. Finally, Watts and Stenner also mention the importance of the Q-sample not being value-laden or biased towards some particular viewpoint or opinion. The participant should not feel limited, restricted or frustrated by failures of balance and coverage.

The statements for this research were collected through the 18 interviews performed by Michel van Wijk, mentioned in the previous chapter. When respondents are asked to freely talk about policy

issues they perceive, it is natural that not only governance topics are discussed, but also substantive issues come to the fore. Therefore, an extraction of quotes from the 18 interviews led to a collection of over 100 statements, both on governance topics as on substantive issues. Michel van Wijk used the transition management perspective to categorise the statements into the three categories of landscape, regime and niches. Van Wijk assured that the statements were divided evenly over these three levels. Therewith the statements were both *naturalistic* as they were the result of pre-interviews in the stakeholder arena, both as *structured* as they were theoretically tested to cover the complete concourse (Kroesen & Bröer, 2009). In the end a good balance was found between purely organisational/governance-related topics and statements that go into the substantive interface themes of the airport with its region (economic development, noise, land use etc.).

After the initial representation of the concourse was collected, a selection of the statements had to be made in order to ensure a workable format. Opinions on the amount of statements suitable for a Q-study vary among researchers. Some researchers suggest that the Q-sample should have a minimum amount of statements around 60 (Kerlinger, 1986) in order to have statistical reliability, while others state that the number of statements should not be not more than 75, in order not to overwhelm the respondents (Schlinger, 1969). McKeown et al (1999) state that the amount of statements can vary between 30 and 100, but will typically be between 50 and 70. This is in line with Schlinger (1969), who considers 55 to 75 statements as ideal. However, it is fair to say that there is no scientific evidence to justify all these conclusions. Therefore, as there is no such thing as a perfect Q-sample, the suggestions of previous researchers should be used as rules of thumb, and not as if they were set in stone.

In collaboration with the Better Airport Regions governance research team, it was decided that 65 statements would be a well-suited amount for this research. This would be enough to capture many aspects of the very broad topic of airport-metropolitan interfaces and their governance without overwhelming the respondents too much. After a process of deduction and expert consultation (Appendix E) the final Q-sample of 65 (Table 21) statements was constructed. In order to come to the final Q-sample the MECE (mutually exclusive collectively exhaustive) principle was applied, which assures that there is no overlap per theme within the Q-set, but the statements cover all relevant issues.

An important notion is that the scope of the Better Airport Regions-project team that initiated this Q-methodology was wider than the research questions answered in this report. A reflection on the selection of statements can be found in Chapter 10. Even though not the complete set of statements is therefore similarly relevant, the research results of the BAR-project are still an interesting addition to this analysis.

As Watts and Stenner (2012) mention, the perfect Q-sample is a thing of fantasy and fiction. Most of the problems can be prevented by close attention to detail and careful piloting, but at the end of the study there will always be some items you would like to change, omit or include.

STEP 2: SELECTION OF PARTICIPANTS FOR P-SAMPLE

The second step of the Q-methodology is to determine the P-sample, a structured sample of respondents who are theoretically relevant to the problem under consideration and are expected to have a distinct viewpoint regarding the topic. In contrast to R-based research, you are not interested in the average opinion, but rather in the establishment of the existence of particular viewpoints, in order to be able to understand, explicate and compare them (Brown, 1980). Therefore, Q methodologists operate using a very strategic approach to participant recruitment

(Watts & Stenner, 2012). For this research it was important to select a very wide range of participants interested in or affected by Schiphol's role in the metropolitan region of Amsterdam. Some of the respondents were involved in one or several governance bodies, while others had much less knowledge on Schiphol governance-topics.

One of the big advantages of Q methodology is that small numbers of participants can be used to generate very big and meaningful conclusions. As Brown (1980) states: you need enough participants to establish the existence of a factor, but what proportion of the population belongs in one factor rather than another is a wholly different matter about which Q methodology is not concerned. Thus, in theory one could already get interesting results with very few respondents or even a single individual. However, there are also movements in the Q-methodology, like the UK tradition of multiple-participant Q-methodology that prescribe a certain amount of participants. For example, Stainton Rogers (1995) considers 40-60 participants to be adequate. Others suggest that in Q-methodology, just like in ordinary factor analysis, also the strict minimum ratio of two participants per study variable should be maintained. In our study this would mean that for an amount of 65 statements, a maximum of 32 respondents would be allowed. However, Watts and Stenner (2012) suggest that it is sensible to stick to a number of participants that is less than the number of items in the Q-sample, but they are not so stringent about the 2:1 ratio.

For this research most of the participants that were consulted in the pre-interviews were also asked to participate in the Q-sort. This list was complemented by more respondents with different roles and backgrounds, to ensure a diverse as possible participant group. In the end this resulted in a P-sample of 41 respondents who performed the Q-sorts from March to May 2013. Within this group of 41 respondents of public authorities, public companies and public/private collaborations, private companies, the aviation sector and several interest groups were represented. Also multiple experts on the Schiphol file were asked to express their opinion through a Q-sort session.

Step 3: Performing the Q-Sort

The respondents were asked to sort the 65 statements on an 11-point distribution (Figure 15). The assignment that was given to the respondents was to sort the statements from the viewpoint of their organisation, in order to make a distinction between personal and professional perspectives.

The forced distribution that is used for Q-methodology encourages the participants to very carefully make trade-offs and prioritise, bringing out the participant's true feelings (Barry & Proops, 1999). Because only a few statements can be put on the extremes, the Q-sort can provide much more information than a regular survey. An interesting example from our research comes from statements that had to with sustainability. At a first glance almost all respondents agreed that the Schiphol airport region should be more sustainable. However, when they had to make priorities, the sustainability-related statements very often disappeared to the middle, indicating that other topics had more priority.

In comparison to a steeper normal distribution, this more platykurtic distribution that was used offers greater opportunity to make fine-grained discriminations at the extremes, so that the good topic knowledge of the participants can be used to the maximum advantage (Brown, 1980).

The recommendations of Watts and Stenner (2012) for carrying out Q-Sorts were used as a guideline. The data-collection procedure is described more precisely in Appendix F.

Step 4: Factor analysis

The fourth step of Q-methodology – factor analysis – can also be divided in several sub stages, as seen earlier in Figure 12.

STEP 4.1 CORRELATION MATRIX

Firstly, a 41 x 41 (n=41) correlation matrix (Appendix G) was constructed to identify the similarities and differences between the 41 Q-sorts. In general, it could be concluded that quite many stakeholders had positive correlations; 19 respondent duos had a correlation of 0.5 or higher. There were much less negative correlations; only 5 duos exceeded -0.2 and the lowest correlation was an outlier of -0.3. Hence, this data suggested that none of the respondents had completely juxtaposing views on the topic.

STEP 4.2 FACTOR EXTRACTION

To identify perspectives in the collected data, a factor analysis using the centroid factor analysis (CFA) method was performed. Another possible method of data reduction and extraction is principal components analysis (PCA). Even though the two methods usually produce very similar results, PCA is not a real factor analysis method and components are not really factors. Moreover, many methodologist do not agree with the idea of PCA that there is one mathematically best solution, which is the one that should be accepted. In contrast to PCA, CFA leaves all possible options open and allows to decide on the best solution after further data exploration (Watts & Stenner, 2012).

For the purpose of factor extraction PQMethod software was used, which is specially developed for the Q-methodology and is available for free download online (Schmolck, 2002). To start with, seven factors were extracted, which is the default number in PQMethod software, but also the recommended number by Brown (1980) and Watts and Stenner (2012). This first extraction led to the unrotated factor matrix, to be found in Appendix H.

STEP 4.3 EVALUATION AND ELIMINATION OF FACTORS

Something that was immediately noticeable when analysing the unrotated factor data is that the first factor by far explained most of the study variance. Almost half of the respondents had a significant factor loading on this factor. Again, like the Q-sort correlations already showed, this indicates a high degree of agreement between respondents. This dominant discourse is further analysed in Appendix K.

Several tests (Appendix I) revealed that Factors 4 and 6 from the unrotated factor matrix were the weakest and had lowest added value and therefore these two factors were eliminated from further analysis. A five factor solution was analysed in the next step of factor rotation.

STEP 4.4 FACTOR ROTATION

Factor rotation does not change the Q-sorts themselves, it merely shifts our perspective on them. While the initial factor loadings stay the same, the factor axes are rotated and therewith the positions of the Q-sorts relative to the factors are changed. Even though mathematically the solutions are still the same, the rotated solution can be better interpretable for scientific purposes (Comrey, 1973).

There are two methods of factor rotation. Firstly, factor rotation can be performed by hand when there is some kind of theoretical need for this. For example when the viewpoints of all respondents

need to be compared with one specific dominant actor or when there is a particular interest in minority viewpoints. The strength of the by-hand rotation is at the same time its weakness. Because the researcher has so much influence on the solution, the analysis can be adjusted so that it fits into the researcher's own understanding of the situation, instead of reflecting the reality (Watts & Stenner, 2012).

The factor rotation that was used in this research – Varimax rotation - is an alternative to theory-based rotation, which is more suitable for large data sets without clear markers in the data. As no theoretical preconception is needed for this method, it is suitable for studies with a very exploratory character, such as the one in this report. Varimax rotation will automatically position the factors in such a way that the overall solution maximises the amount of study variance explained. Even though this method is drawn towards the crowds, if there is no theoretical reason to rotate by hand, Varimax will provide with a very workable factor solution (Watts & Stenner, 2012).

Step 5: Interpretation of results

In order to be able to interpret the Q-sort data, factor arrays are created which give us an overview of the overall viewpoint of each factor. To estimate these factors the weighted averages are used of all defining Q-sorts for that factor (Appendix J). Q-sorts with a higher factor loading contribute more to the final factor estimate than Q-sorts with a relatively low factor loading. The factor array can be seen as an example of a Q-sort of how someone agreeing completely with the particular viewpoint of that factor would have sorted the statements. However, obviously it is hard to find participants that load 100% on a factor and who completely agree completely with the factor perspective.

Grouping all the items into just a few factor arrays therefore does entail a loss of information compared to all the data we have gathered in the previous stages. Nevertheless, factor arrays are a comprehendible way of data representation, they 'conform to the format in which the data were originally collected' (Brown, 1980, p. 243) and they suit the holistic nature of Q-methodology (Watts & Stenner, 2012).

Even though the factors obtained from rotation are orthogonal and zero-correlated, the factor arrays will always contain some error and be intercorrelated to some extent. Table 14 shows the correlations between the factor scores for the five factors. It is clear that there are no entirely contrasting perspectives on the topic. On the contrary, all five factors are positively correlated in quite a strong way, especially Factors 1 and 3 (0.49). From these high factor correlations, one can again conclude that there is quite some agreement on the topics from the Q-sort, at least for the respondents in this research.

The following chapter gives a more detailed interpretation of the five factors and treats their differences and similarities.

7 RESEARCH RESULTS: SIMILARITIES AND DIFFERENCES BETWEEN THE DIFFERENT PERSPECTIVES

This chapter presents the research results from the Q-methodological research introduced in the previous chapter. To begin with, a first impression of the data is given and a shared perspective amongst the majority of the respondents is defined in Pargraph 7.1, 7.2 and 7.3 Afterwards, the focus is more on each of the five different perspectives in Pargraph 7.4 and their priorities and the differences between them in Paragraph 7.5. Finally, in Paragraph 7.6 a conclusion will be given on the added value of the Q-methodology.

The previous chapter has indicated that there is a large correlation between the different perspectives. This indicates that there is a shared opinion on many of the statements. To get a better insight into what topics there is agreement on and on what topics there is not, firstly a general overview is given of the 5 most agreed and disagreed on topics amongst the participants. These topics contain both governance as substantive themes. This chapter will treat both types of statements consecutively.

7.1 A Shared Opinion on Governance

In Table 5 and Table 6 the most agreed and disagreed on governance statements amongst all respondents are represented, which means that in the general opinion these statements score very high and very low respectively.

An overview of these statements provides us interesting information on topics that stakeholders are very strongly outspoken about. For instance, it is clear that in the general opinion a public transport authority is very important for the regional economy and the respondents also believe that it is possible to have such an authority in place before 2020.

Many of the other statements with extreme scores relate to which parties should be allowed to participate in decision-making and which should not. The respondents do seem to believe in a large role for public authorities in decision-making, as the general opinion is against the privatisation of Schiphol and believes that the national Government should definitely interfere with Schiphol policy. *"Schiphol is a public utility company and the national Government has to protect its forced users, more than just by legislation. Moreover, the national Government has to safeguard the economic development of the region"* (Respondent 34). The respondents believe that currently already many short lines are in place between Schiphol, KLM and the Ministry of Infrastructure and Environment. *"Personal relationships between some key players are of the largest influence in Schiphol decision-making. Of course the governance platforms provide some counterbalance, but the real knots are cut through the old-boys' network"* (Respondent 20). Some see this as a bad development: *"Schiphol has a holy status in this country, whatever they want they will get and the region does not have anything to say at all, even though they pretend that there is some regional participation, in the end the economic importance of Schiphol will always get the priority"* (Respondent 21). Others see these short lines as a given when it comes to issues of large national importance and do not see the problem with it: *"if we wouldn't have these short lines, no decisions would be made at all!"* states Respondent 30. Moreover, not only Schiphol and KLM have these good connections with the national Government, states Respondent 9: *"Some inhabitants of the region have been involved in the Schiphol file for so many decades that they have just as much power to block or initiate something through direct contact with the Ministry."*

The respondents generally have some faith when it comes to administrators from the municipalities surrounding Schiphol, the general opinion is that they do not only care about land profits. However, it is not merely to the local administrators in the region to decide on the development of the airport region, other parties should also be involved in the policy-making as the municipalities can never represent all interests. Therefore, citizens, but also companies and knowledge institutes should be able to co-decide on regional investments. Even though these parties should be invited to discuss regional airport-related issues, holding a referendum to decide on items such as development of the airport is one step too far on the participation ladder for most respondents. *"The development of Schiphol is not a public issue. We also do not have debates about the growth of Shell, do we? It should be sufficient if the government just sets strict rules in order to protect the surrounding inhabitants"* (Respondent 24).

The ranking presented in Table 5 and Table 6 is based on the sum of the five factor array scores for those statements. The fact that the presented statements respectively have the highest and lowest total scores does not mean that these statements are the ones with the most consensus. A very high or low score can also be caused by the very extreme opinions of a few stakeholder groups, while other perspectives might completely have opposite viewpoints or be more neutral about those statements. The statements on which most consensus exists and the statements for which the difference between the five different perspectives is smallest - therefore differ from the 10 statements discussed previously.

The statement that a public transport authority is the base for a competing regional region scores high amongst all stakeholder groups, which again shows the generally positive attitude towards such an authority. Statements 35 (*If the BFS is abolished, Schiphol should become a formal party in AMA governance bodies*) and 38 (*The shareholders of SADC give sufficient direction*) have received a relatively neutral ranking from the respondents. An explanation could be that these statements ask for an opinion on quite specific topics and participants find it difficult to have outspoken opinions on such themes when they are not very familiar with the issues.

One topic all perspectives agree on is that reviving the BFS will not have much sense. There is a general agreement that the current governance environment is characterised by too many collaborative bodies in which the same municipal administrators meet each other repeatedly. *"The Bestuursforum should definitely not be revived, there are already too many governance bodies. All relevant parties should at most participate in two collaborations, instead of 20 like it is the case now"* (Respondent 13).

TABLE 5: TOP 5 MOST AGREED ON GOVERNANCE STATEMENTS

1. The most important decisions about Schiphol and the region are made through short lines with the Ministry of I&E. (29)
2. A regional public transport authority is the base for a competing metropolitan region. (53)
3. For our organisation it is for the best that the partial privatisation of Schiphol did not take place. (51)
4. Companies and knowledge institutes should co-decide on the investments of the Amsterdam Economic Board. (45)
5. In 2020 there will be an AMA public transport authority. (52)

TABLE 6: TOP 5 MOST DISAGREED ON GOVERNANCE STATEMENTS

1. It is important that citizens express themselves in a referendum before any expansion of Schiphol. (11)
2. The national Government should interfere with Schiphol policy as little as possible. (27)
3 Eventually the local administrators in the BRS should decide on the growth of Schiphol. (15)
4. All parties are represented by the municipality and do not need their own representatives in the Schiphol governance bodies. (13)
5. Governments in the Schiphol airport region act as profit-oriented enterprises. (24)

TABLE 7: TOP 5 GOVERNANCE STATEMENTS WITH MOST CONSENSUS

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1. In 2020 there will be an AMA public transport authority (52).	2	1	2	2	2
2. If the BFS is abolished, Schiphol should become a formal party in AMA governance bodies (35).	0	0	-1	-1	1
3. The BFS should be revived as soon as possible (23).	-2	-2	-1	-3	-2
4. A regional public transport authority is the base for a competing metropolitan region. (53)	4	1	3	2	2
5. The shareholders of SADC give sufficient direction. (38)	1	-1	2	0	1

7.2 A Shared Opinion on Substance

An analysis of the most (dis)agreed on statements that concern substantive topics (Table 8 and Table 9) shows us that most participants acknowledge the general idea of the importance of Schiphol, KLM, infrastructure and area development for the region and its economy. *"In our globalised society, connecting people to the rest of the world is essential. If we would lose the 25 million people that come here through Schiphol, the international dynamics that are so important for the economy will disappear"* (Respondent 29). *"The importance of Schiphol as Gateway to Europe is growing. If Amsterdam wants to belong to the top 50 of Metropolitan Regions, Schiphol should keep developing"* (Respondent 34).

Moreover, this overview shows that noise is a topic that stakeholders feel very strongly about. Generally, the respondents agree that when it comes to housing near Schiphol, noise contours should be respected and noise measurements should be performed by an independent party. Most respondents think that noise limits should not be something that is discussed on a local level.

An interesting observation is that nearly all these statements are related to either economy or noise and thus reflect the classic dialogue of the deaf identified by van Eeten already in 1999. This tendency is also seen in Table 10, which shows substantive statements that most consensus exists on. The views on most of the consensus statements are quite neutral; it can for example be observed that the respondents don't have any strong feelings about farmer-involvement around Schiphol. However, the statement that stands out and shows both a strong consensus as a strong preference is the idea to introduce local noise limits. All stakeholder groups are quite strongly against this idea.

TABLE 8: TOP 5 MOST AGREED ON SUBSTANTIVE STATEMENTS

1. For the development of the region governments need to invest in infrastructure and area development. (6)
2. If KLM loses its hub status at Schiphol, the regional economy will suffer severely. (4)
3. A well-connected airport is the most important factor for our metropolitan economy. (1)
4. In the future noise measurements should be performed by an independent institute. (50)
5. Future housing in the AMA should be rather built by densification than by building closer to Schiphol. (58)

TABLE 9: TOP 5 MOST DISAGREED ON SUBSTANTIVE STATEMENTS

1. Only by using local noise limits local governments can influence the flight behaviour at Schiphol. (49)
2. Schiphol as 'Gateway to Europe' is less important for the AMA than 10 years ago. (5)
3. We should only add new Schiphol destinations if this attracts new companies. (3)
4. The importance of Schiphol's international network is overestimated. (2)
5. In the future KLM will not be a dominant party at Schiphol anymore. (34)

TABLE 10: TOP 5 SUBSTANTIVE STATEMENTS WITH MOST CONSENSUS

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1. Local farmers should play a role in the processing of Schiphol's bio waste (61).	0	0	2	0	1
2. I think that it is better if Schiphol does not develop any real estate outside the Schiphol territory (outside the fence)(48).	0	2	0	-1	2
3. Only by using local noise limits local governments can influence the flight behaviour at Schiphol. (49)	-3	-2	-4	-5	-4
4. KLM creates employment here, other airlines barely do. (33)	0	0	1	2	-1
5. Farmers should get paid to maintain the landscape around Schiphol, instead of having to pay for land lease. (54)	1	1	0	0	-2

As is noticeable from these statements and was previously mentioned, there is quite some agreement on many substantial and governance topics in the Schiphol region. This is also underpinned by the fact that even before factor rotation 30 out of the 41 respondents load significantly on one factor (Table 24). This means that there is one dominant discourse that represents the general opinion quite well. It is interesting to have a closer look at this factor, therefore Appendix K returns to the unrotated solution and analyses this factor array of unrotated Factor 1.

As unrotated Factor 1 represents a somewhat generally accepted perspective, to no one's surprise all of the statements that are rated highest and lowest in this factor array are similar to the top 5 highest and lowest rated statements overall that were discussed previously in this chapter.

7.3 Disconsensus on Governance and Substance

The previous paragraphs have shown us the statements that most stakeholder groups agree on and has therewith analysed the dominant discourse. However, while looking at the general opinion and consensus topics is very interesting and useful, it might be even more insightful to have more knowledge on the topics on which is least consensus amongst the different factors.

When it comes to governance statements the largest disconsensus exists on introducing new regional governance bodies, such as a metropolitan board or a regional development company (Table 11). Some perspectives are very sceptical about setting up new bodies, while others see this as a way forward. Much less disconsensus is seen at for example the introduction of a regional public transport authority, but this is something that is already decided on. Whether parties were able to make the decision for the introduction of a public transport authority because there was less disconsensus, or whether there is less disconsensus because the decision is already made, remains unclear.

Also there is a big difference between how much faith the different perspectives have in municipalities and the province. Some of the perspectives find that municipalities only care about land profits, while others strongly disagree with this. Similarly, some of the perspectives find that the Province has zero authority concerning Schiphol, while others think the influence of the Province is much larger.

Finally, a last large difference is that Factors 1 and 2 completely disagree with letting decisions on the growth of Schiphol up to regional governance arrangements, while the other three factors are much more neutral on this way of organising decision-making.

TABLE 11: TOP 5 GOVERNANCE STATEMENTS WITH LEAST CONSENSUS

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1. Eventually the AMA should have one regional development company (47).	4	3	-4	0	-4
2. The AMA should get one transparent metropolitan board (42).	2	5	0	2	-2
3. Policy decisions do not show enough distinction between the public spatial planning task and the land ownership: our own locations first! (22)	-3	4	3	5	-1
4. The Province lost its control on the Schiphol file. (9)	3	4	1	-1	-3
5. Local administrators and interest groups should decide jointly on the growth of Schiphol. (16)	-4	-5	1	1	0

Substantially, it becomes immediately clear that the disconsensus about noise contours and construction of housing within these contours plays a large role in the frictions within the policy arena (Table 12). Moreover, the perspectives disagree on the exact importance of Schiphol for the metropolitan economy. Factor 1, 3 and 4 completely agree with this, while Factors 2 and 5 are more neutral. Although they probably also agree that the airport is important for the AMA, they do not think one could say that it is the _most_ important factor. This same argumentation goes for Schiphol's sustainability efforts. While all parties see that Schiphol is making some effort to be more sustainable than in the past, a few of the perspectives believe that aviation will never be sustainable or that Schiphol should do much more than it does now.

TABLE 12: TOP 5 SUBSTANTIVE STATEMENTS WITH LEAST CONSENSUS

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1. It is up to the market whether there is a need for dwellings within the noise contours (57).	1	-5	-5	0	5
2. No new residential areas should be constructed within the noise contours (56).	0	2	4	-5	2
3. A well-connected airport is the most important factor for our metropolitan economy (1)	5	0	5	5	1
4. At the moment Schiphol is sustainable enough. (64)	1	-5	1	-3	-1
5. Future housing in the AMA should be rather built by densification than by building closer to Schiphol. (58)	5	4	3	-1	5

All these topics with the least consensus deserve room on the governance agenda.

7.4 The Five Factors and Their Characteristics

The previous paragraphs have discussed shared perspectives and the largest disconsensus topics. This paragraph continues to zoom in on the differences between the stakeholder perceptions. The five different factors will be discussed with their main viewpoints and priorities. Also an overview is given of which stakeholders load highest on which factor, in other words which stakeholders share similar perspectives. One should keep in mind that even though the respondents were asked to represent their organisational viewpoint, the overview from this research might not necessarily be a good representation of the complete organisation or of the official statements made by their organisations. However, it provides interesting insights about current perspective coalitions and collaboration difficulties.

Table 13 provides a quick overview of the five factors, the respondents that match best with this each perspective, the main priorities of these perspectives and their main perceived issues.

TABLE 13: OVERVIEW OF THE FIVE FACTORS

Factor label	Respondent organisations	Main priorities	Main perceived issues
Factor 1: Aviation Growth	Schiphol Group, Schiphol Real Estate, Municipality of Haarlemmermeer (2x), Municipality of Amsterdam (3x)	The airport as a growth engine of the metropolitan area Formalisation of regional collaboration through a regional development company, transport authority and a metropolitan board A strong national Government	Not much wrong with the way it currently goes. Maybe the current regional collaboration is too informal and could split when problems arise
Factor 2: Sustainable Change	Schiphol Quality of Life Foundation, Society for Nature and Environment, Farmer Representative, Delta Project Developers, Municipality of Haarlem, Municipality of Amsterdam (1x), Expert (1x)	Sustainability Quality of the direct environment of the airport Strict noise policy Transparant metropolitan policy making	Not enough parties involved in decision-making Lack of democratic and transparent procedures Lack of attention for sustainability

Factor 3: Economic Growth	Greenport Aalsmeer, Greenpark Aalsmeer, Port of Amsterdam, KLM, Municipality of Lelystad, Ministry of Economic Affairs, LVNL, VNO-NCW, Inhabitant representative	The airport as a growth engine of the metropolitan area A strong national Government Strict noise policy Strict land use policy	The region expects too much from spatial planning concepts as airport city and the airport corridor Municipalities are too focused on land profits
Factor 4: Governance and Market	Province of Noord-Holland (1x), Municipality of Aalsmeer, Municipality of Amstelveen, SMASH, Waterboard of Rijnland, Amsterdam Economic Board	Importance of regional public collaborations such as the BRS Consultation with a large range of parties in policy-making	The national Government delegates too much to the region Municipalities are too focused on land profits Not enough flexibility on housing within noise contours
Factor 5: Government and Market	Municipality of Haarlemmermeer (1x), Province of Noord-Holland (1x), Ministry of I&E (2x), City Region of Amsterdam (1x)	Trust in State, municipalities and especially the Province Private involvement in regional investments and decisions Freedom to the market, also when it comes to noise contours	Too much regional collaborations Not enough distinction between public and private roles of public companies Too much regulation

The following five pages give an overview of the viewpoints of each factor, both on governance as substantive topics. This analysis is based on the Factor array to be found in Appendix L. The stakeholders are assigned to one of the factors based on their highest factor loading or in case of two similarly high factor loadings based on a good fit with the other stakeholders in one of the factors.

Factor 1 – Aviation Growth
Perspective on governance issues in the Schiphol region

- Decisions in the Schiphol-region do not lack in democratic legitimacy. Interest parties and surrounding municipalities should be invited to governance bodies for consultation, but not allowed to decide on the growth of Schiphol.
    - *"Democratic shortage is not the problem of decisions in this region. Even though they are not always transparent, decisions have to go through enough boards to be legitimate"* (15)
- Regional collaboration is already functioning quite well, as is proven by for example the Plabeka agreements. However, innovations in regional governance collaborations are welcome, such as a new AMA board, a metropolitan development company and a regional transport authority. The current informal regional collaboration might split when problems arise.
    - *"I can imagine a regional development company with a common goal and the scope of the AMA. The Airport Corridor Development Company sounds like a good idea to me"* (29)
- The final decision on the development of Schiphol is and should be with the national Government and not up to regional governments or regional governance arrangements. However, as the Province has no power at all, Amsterdam could take a more active role in regional governance arrangements.
    - *"Since 2000 the Province has been mainly searching for its role; since then their influence has dropped. This is very typical for the identity crisis all provinces are in now"* (16)

Factor 1 – Aviation Growth
Perspective on substantive issues in the Schiphol region

- Schiphol is very important, it's hub and Mainport functions make it a Gateway to Europe and are essential for the metropolitan region and its economy. Therefore the airport should keep developing as an Airport City and along the Airport Corridor.
    - *"The international network of Schiphol is a basic condition for people to come to Amsterdam"* (16)
- Noise can sometimes be an issue, but it is already discussed a lot in current governance bodies like the Alders Table. Although new housing should preferably be built within existing urbanised areas, sometimes flexibility with noise contours should be possible.
    - *"In the outside noise contours there is definitely room for differentiated, flexible building. For Schiphol it is also not good if new construction keeps being blocked because of the airport"* (29)

Factor 2 – Sustainable Change
Perspective on governance issues in the Schiphol region

- Decisions in the Schiphol-region lack in democratic legitimacy. Much more parties should be involved in policy making processes. Currently too many decisions happen through short connections with the National Government.
  - *"For our organisation it is a given that local decisions lack in democratic legitimacy. Something like Plabeka is just presented to us and we weren't involved at all"* (26)
  - *"Schiphol is an untouchable topic in this country and the region does not have a say at all. The board of Schiphol just calls the ministry to organise whatever they need, after which all types of constructions are made to get around regional participation"* (21)
- Sceptical about governments: distrust in knowledge level national government, in power of Province and in ability of municipalities to make rational decisions about location development.
  - *"Employees at the ministries do not have enough knowledge on the actual practice, as they are just attending meetings and never really come to the regions they are talking about"* (18)
- Regional collaboration in the AMA exists and is very important, as the Province does not have any influence. Therefore the AMA should get an extra administrative layer and metropolitan development company.
  - "We should be careful about introducing an extra administrative layer and using fashionable words like transparent, but an open and bottom-based AMA board would be a very good development."

Factor 2 – Sustainable Change
Perspective on substantive issues in the Schiphol region

- Sustainability is very important and Schiphol could do much more about this topic, via emission restrictions, taking better care of its surroundings and using local products.
  - *If I would have to name something unsustainable, this would definitely be Schiphol"* (22)
  - *Using local products or services by famers would connect Schiphol to the region, instead of seeing each other as a problem"* (26)
- Neutral attitude towards importance of Schiphol and KLM for region.
  - *"If KLM leaves, another company will replace it, which might be even more favourable"* (22)
- It is completely not up to the market whether dwellings are built within the noise contours. Processes around noise measurement should become more transparent.
  - *"Giving market parties too much freedom about noise contours will lead to problems in the future"* (26)

Factor 3 – Economic Growth
Perspective on governance issues in the Schiphol region

- Government influence is very necessary, for example to solve problems on the real estate market. Public companies should be treated as governments. Moreover, the government should make strict rules about where to build offices or dwellings
  - *"I am glad that the government is a shareholder at Schiphol, because then they can be called to account for their social mission" (37)*
- Not in favour of adding more regional governance bodies, except for maybe a metropolitan transport authority
  - *"I don't think we should add another administrative layer, but we should definitely look into how we can make existing governance bodies collaborate on a more regional level" (27)*
  - *The public transport connections between the city and its surrounding metropolitan area should be better adapted to the economic opportunities that are present" (17)*
- The responsibilities for Schiphol are and should be with the national Government
  - *"Schiphol is a public utility and the national Government has to take care of the forced users, more than in just a law, in order to guard the economic importance" (34)*

Factor 3 – Economic Growth
Perspective on substantive issues in the Schiphol region

- Schiphol is very important, it's hub and Mainport functions make it a Gateway to Europe and are essential for the metropolitan region and its economy
  - *Schiphol and KLM may be located in this region, they are of national importance and a huge driver of our national economy" (23)*
  - *"If Amsterdam wants to compete with the top 50 international cities, they have to keep developing Schiphol" (34)*
- Sustainability is not a big issue and should not stand in the way of growth
  - *"Schiphol can give positive incentives for cleaner aviation, but if Schiphol is much stricter than e.g. Frankfurt the airplanes will land there and the global environmental issues will still not be solved" (37)*
- Even though noise is discussed too much, it is important that it is not up to the market whether dwellings are built within the noise contours. No expansion within the contours should be allowed, just densification
  - *"Building new dwellings within the noise contours is very undesirable. Even when you prepare people, they will eventually also start complaining, because they don't know how bad it is until they actually live there" (5)*
  - *Some parties focus too much on noise while Schiphol is so important for the economy. Of course aviation is polluting, but this is in balance with the benefits" (23)*

Factor 4 – Governance and Market
Perspective on governance issues in the Schiphol region

- Regional collaboration through bodies such as the BRS is functioning alright and therefore the current public and private roles should be safeguarded. Quite unimpressed with the results of the Plabeka collaboration. Potentially improvements to regional collaboration could be made by introducing an AMA board or regional transport authority
  - *"Regional collaboration is important to come to good decisions. But if the AMA will get its own administrative layer, some other layers need to be removed first" (33)*
- *Democratic legitimacy is not a very big issue in the Schiphol region. However, it is important that interest parties are invited into governance bodies*
  - *"There is no lack of democratic legitimacy, because all the local administrators can be held accountable by the electorate" (30)*
  - *"Interest parties should not be a part of the final decision making, but should definitely have a say" (30)*
- *The national Government should have some control on the Schiphol region, but there is mainly a need for a balance between private and public parties.*
  - *"Of course the national Government should be involved in Schiphol issues. However, they do cooperate with other parties. The national Government should not steer too much, but provide a structure" (14)*

Factor 4 – Governance and Market
Perspective on substantive issues in the Schiphol region

- Schiphol is quite important for the region, especially the role of KLM. It's hub and Mainport functions make it a Gateway to Europe and are valuable for the region and its economy
  - *"It is proven that a metropolitan area is nothing without an airport and vice versa" (6)*
- Even though municipalities will always prioritise their own locations, there should definitely be space to discuss more within the noise contours between municipalities and the market, preferably on new locations instead of densification of current locations
  - *There are still locations with opportunities for dwellings, if we just keep on innovating our building techniques" (33)*
  - *"Currently there is not enough flexibility concerning what is allowed to be built within noise contours" (11)*
- Neutral attitude towards sustainability. Refusing polluting aircrafts could make Schiphol more sustainable
  - *"I don´t know exactly how sustainable Schiphol is compared to other airports, but it always seems like they are already doing a lot about it" (33)*

Factor 5 – Government and Market
Perspective on governance issues in the Schiphol region

- Much trust in traditional governments. The National Government has sufficient knowledge and should make the final decisions on the airport, the Province still has influence and municipalities do not act solely from a financial perspective. The region is already able to cooperate on some Schiphol-topics, so sceptical about adding an administrative layer, first the possibilities for the merger of the Provinces should be explored
  - *The last thing we want is adding another administrative layer. Let's first see what will become of the planned province fusion"* (13)
  - *In contrast to other files like the Fyra, the national government has definitely sufficient knowledge about the ins and outs of Schiphol or who to contact for more information"* (13)
- More decisions should be left to the market. For example about where to build dwellings or what to invest in
  - *We've used these complex government-owned corporations for years, but governments need to start making a decision, whether to take it up themselves or leave it completely up to the market. Schiphol has a clear market task and could be privatised"* (38)
- Democratic legitimacy is not a very big issue in the Schiphol region. However, administrators should work together with interest parties on decisions about growth of the airport
  - *Of course someone has to make the final decision, but doing this together with the inhabitants and the sector will create more social support"* (13)

Factor 5 – Government and Market
Perspective on substantive issues in the Schiphol region

- Neutral attitude towards the importance of Schiphol for the region. The employment the airport brings is important, but otherwise the positive effect of the airport on the region is overrated
  - *"The metropolitan region has become much more multiform than purely the Schiphol activities"* (12)
  - *"Of course a well-connected airport is important, but the strength of the metropolitan region is Amsterdam and not Schiphol"* (13)
- It is completely up to the market to decide on dwellings within the noise contours. Flexibility with noise contours is needed, but densification is preferred to expansion
  - *"There are so many different noise contours that we cannot be too strict with them"* (12)
  - *"We need new dwellings within this region so new dwellings should also be built within the noise zones. If people are informed well, they can decide for themselves if they choose to live there. Noise is a part of city life"* (13)
- Sustainability is an important topic nowadays and Schiphol could do a bit more about it
  - *"In order to be fashionable Schiphol is doing some things that have to do with sustainability, but aviation is by definition not sustainable"* (13)

7.5 Reflection on the Five Perspectives

The overview of the five different factors and their main viewpoints provides an interesting new way to look at policy-making in the Schiphol region.

The first two factors are a representation of the classic growth-noise dialogue, also discovered in the three previous Q-studies on Schiphol. However, it would do these perspectives no justice to see them as two opposite ends of a two-dimensional spectrum. Even though the Aviation Growth-perspective is strongly in favour of the further development of the airport and does think that noise-issues are currently discussed too much in the governance bodies, also they are in favour of a careful construction policy within the noise contours. Similarly, while the Sustainable Change-perspective does focus very strongly on noise and sustainability issues, this perspective does not deny the importance of Schiphol's network for the regional economy. In addition, statements that relate to development or noise and sustainability issues reflect less than a third of the statements. Therefore we have a much richer overview of the perspectives than just this one contradiction.

Also three other ways to perceive governance and substantive issues in the Schiphol region have been found. Again, perspectives 3-5 are not fundamentally juxtaposing the first two perspectives, but differ in the substantive themes they focus on and in their preference in governance style. Factor 3 focuses on economic development through a strong government intervention, Factor 4 is less concerned about changing the current situation and focuses on public-private collaboration, while Factor 5 has the largest trust in a combination of the traditional government and the market to solve current issues.

7.5.1 The five perspectives: stakeholders

When we consider the organisations the respondents belong to for each factor, again Factor 1 shows a quite predictable group of the old-boys network of several respondents from Amsterdam and Haarlemmermeer, the Schiphol Group and Schiphol Real Estate; all parties that benefit from further development of the airport's (aviation) activities. The economically-focused Factor 3 shows some expected parties that are less connected to the airport itself, but also have an interest in keeping the airport region economically attractive. It might be no surprise that the Sustainable Change-perspective contains respondents from the Schiphol Quality of Life Foundation, the Society for Nature and Environment and a farmer representative. Factors 4 and 5 show a mix of public parties at different levels.

However, not all respondents load high on the factor where they might have been expected to end up. For example, while one would probably expect the inhabitant representative to score highest on the Sustainable Change-perspective, this respondent on the contrary had a much higher factor loading on Factor 3: Economic Growth. An exact opposite example is the project development company Delta, which one would probably expect to end up in the economically-focused Factor 3, but which loaded significantly higher on the sustainability-oriented Factor 2. Admittedly the resident representative might have been more economically-focused than the average inhabitant of the airport region and Delta is a development company that has a relatively large focus on sustainability, but this shows the bias that a typical stakeholder analysis without actual stakeholder input could contain.

Another remarkable observation is that in some cases where several respondents from the same organisation participated, they did not always load high on the same factor. This shows that while people are usually quite aware of the viewpoints of their organisation on many topics, when statements need to be prioritised respondents seem to find it difficult to distinguish between organisational and personal (political) preferences. However, an organisation is made up out of a

collection of individuals. One could wonder whether individuals are able to put their personal viewpoints to the side when they have to prioritise certain tasks or decisions during their work at all.

7.5.2 The five perspectives: similarities and differences

The fact that five perspectives were discovered does not mean that the differences between these five perspectives are very large. As stated earlier, there are quite some statements that show a consensus between all or most of the perspectives. Even though the Sustainable Change-perspective is most reserved, all factors for instance acknowledge the importance of Schiphol and KLM for the region.

This is also proven through the fact that many respondents subscribe to two or more factors (Table 24), which means that the perspectives are definitely not mutually exclusive. Many of the respondents that loaded high on multiple factors were from the expert group, which are probably less outspoken and have a more nuanced view on the Schiphol case than some of the stakeholders. However, also several influential respondents loaded high on more than one perspective. If the respondents loaded highly on several factors, these were not always the same two or three factors. In the contrary, many combinations can be observed and even several respondents subscribe to both Factor 1 and 2, which on a first glance seem to be the two most incompatible views.

However, when the correlations between all the factors are analysed, not Factor 1 and 2 appear to be furthest apart from each other, but Factor 2 and Factor 5 (Table 14). Again, this table underlines the large common ground between the different perspectives, which is shown due to the high factor correlations. None of the factor duos have a negative correlation. Except for the combination of Factor 2 and Factor 5, all other combinations even share at least a third of their perspective with the other factors.

TABLE 14: FACTOR CORRELATIONS

	Correlation
Factor 1 - Factor 2	0.35
Factor 1 - Factor 3	0.49
Factor 1 - Factor 4	0.41
Factor 1 - Factor 5	0.44
Factor 2 - Factor 3	0.42
Factor 2 - Factor 4	0.32
Factor 2 - Factor 5	0.24
Factor 3 - Factor 4	0.35
Factor 3 - Factor 5	0.41
Factor 4 - Factor 5	0.33

The relatively high correlations between the five perspectives in this research quantify the process management theory of the multi-issue agenda. This important principle in process management entails that to better be able to come to agreements, a wide range of topics needs to be discussed, because otherwise the negotiations will often end up in a yes-no discussion.

If – for instance - this research would only have analysed the correlation between the perspectives when it comes to the topic of construction within noise contours (Statements 56,57,58) the correlations between the perspectives would have been completely different than those in Table 14. In that case Factor 2 and Factor 3 would have a very large correlation of 0.95, while on the other hand Factor 3 and Factor 4 would have had a strongly negative correlation of -0.74. By adding more topics to the

agenda of this research, the differences of opinion between the factors have become smaller and it was possible to find a common ground between the different perspectives.

As for the purpose of this research a distinction was made between governance and substance related statements, this differentiation can also be made when it comes to factor correlation (Table 15). This gives a different insight into how the factors are related. For some of the factor duos this distinction between governance and substance does not make a large difference; on both type of topics they have a similar agreement. Nevertheless, for other factor duos the difference on agreement between governance and substance is substantial. The most extreme examples are Factor 1 and Factor 4. While these showed a large common perception in the general correlation table, Table 15 makes clear that these two perspectives mainly share the same views on substantive topics such as noise, housing and economic development. However, while these two perspectives largely agree on substantive topics, when it comes to the question how these should be organised, they fundamentally have differing views on the right governance approach (a correlation of only 0.16).

In general a much larger correlation can be observed on content than on governance. This could possibly be explained by the fact that the focus of most discussions in the previous years has been on substance, which made that large difference on these topics between stakeholders might have softened out a bit and stakeholders views have grown towards more towards each other. This effect has been described in for example the research of Cuppen (2012), in which was quantified that sharing perspectives amongst stakeholders leads to more understanding and less extreme opinions in the stakeholder arena. However, currently a focus shift seems to be occurring from substance to governance, as also evident in the focus of the advice report of Council for the Environment and Infrastructure (2013). The expectation is therefore that the more often governance topics are discussed amongst stakeholders, the larger the correlation between the different perspectives will also become on governance topics.

TABLE 15: FACTOR CORRELATION DIVIDED INTO GOVERNANCE AND SUBSTANTIVE

	Governance Correlation	Substantive Correlation
Factor 1 - Factor 2	0.36	0.34
Factor 1 - Factor 3	0.27	0.56
Factor 1 - Factor 4	0.16	0.60
Factor 1 - Factor 5	0.28	0.55
Factor 2 - Factor 3	0.38	0.58
Factor 2 - Factor 4	0.33	0.39
Factor 2 - Factor 5	0.20	0.45
Factor 3 - Factor 4	0.30	0.38
Factor 3 - Factor 5	0.49	0.42
Factor 4 - Factor 5	0.31	0.39
Average	0.31	0.47

7.6 The Added Value of the Q-methodology for this Research

This chapter has discussed the results of the 41 Q-methodological interviews that have been performed to analyse stakeholder perspectives on decision-making in the Schiphol region. The appropriateness of the Q-methodology and the fit of the Better Airport Regions-statements for the purpose of this research are further discussed in the reflection in Chapter 10.

Concludingly, the Q-methodology has provided several new insights for this research that did not come to the fore from the qualitative pre-interviews. To summarise, the quantification of stakeholder perspectives in this chapter added to the enumeration of issues in Chapter 5 by:

☐ Providing a scale of reference. The Q-method made clear which issues were seen as most important and which suddenly disappeared to the bottom of the heap when priorities had to be made;

☐ Revealing that one cannot generally speak of a problematic governance situation in the Schiphol airport region, as the problem perception and focus differs strongly from one perspective to the other;

☐ Exposing the difference between 5 different discourses, but most importantly proving that – at least for the respondents from this research - there is a large commonly shared base for the stakeholders to build on;

☐ Quantifying the multi-issue agenda theory of process management;

☐ Grouping the respondents into similar-thinking groups and thereby showing that 1) there is still a traditional distinction between a growth coalition and an environmental-focused group, but that there are also three other perspectives to take into account, 2) that stakeholders do not always share the perspective you would expect them to share so that care must be taken when making pre-assumptions;

☐ Expanding our understanding of the perspectives of the growth-coalition and the environment-coalition by providing a much broader view of their arguments than the mere contradiction we already know;

☐ Proving that there is a difference between agreement on substantial issues and agreement on how these issues need to be addressed;

All this information can help policy makes to set the priorities on their agendas straight. The outcomes of the Q-sort provides a workable format that might in some cases be a bit simplistic, but can be used to start discussions and share insights with the involved stakeholders and therewith create more understanding for each other's perspectives. Finally, it can also help policy makers to frame certain issues or solutions in a strategic way to appeal to certain perspective groups.

This better understanding of different perspectives is used to discuss opportunities for governance improvements in the next chapter.

8 SYNTHESIS: COMBINING ISSUES AND PERSPECTIVES TO COME TO OPPORTUNITIES

This chapter combines the analysis of the stakeholder-driven discussion of governance issues from Chapter 5 and the different stakeholder perspectives from Chapter 7 in order to conclude where the opportunities for governance improvements are. The five governance issues and the opportunities for their improvement are treated consecutively in Paragraph 8.1 to 8.5.

In Chapter 1 the following main research question was introduced: *What are the issues and stakeholder perspectives that can be distinguished regarding Schiphol-Amsterdam interface governance and how can this better stakeholder knowledge help to provide new insights on opportunities for improvements of the current governance?*

Up to now this research has answered the first part of this question by using expert and stakeholder input to analyse the governance issues in the Schiphol airport region and by distinguishing five different ways to perceive airport-metropolitan interfaces. As the previous chapter has concluded, the application of the Q-methodology and the analysis of the five stakeholder perspectives can help to put the governance issues into perspective. While in a qualitative interview respondents can just enumerate a large amount of issues, in a Q-sort they are forced to prioritise these and only then comes to the fore what they truly find important.

Therefore, the combination of the governance issues and the insight into stakeholder perspectives can help to point to opportunities for governance improvements and therewith answer the second part of the main research question.

A first step to come to these opportunities is to rate the five governance issues defined in Chapter 5 from the viewpoint of the five stakeholder perspectives from Chapter 7 (Table 16). Even though the five issues are on a higher level than the statements in the Q-analysis and the 65 statements did not literally contain these overarching issues, some differentiation can still be made with the better understanding of the perspectives that is now in place. Appendix M provides a detailed overview of which of the 65 statements relate to which of the five issues.

TABLE 16: CONCERN ABOUT GOVERNANCE ISSUES FOR EACH PERSPECTIVE

Governance issues	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Inefficiency due to fragmentation and redundancy	-	++	0	0	++
Lack of democratic principles	--	++	0	0	0
Lack of comprehensive decision-making on land use themes	-	++	++	+	+
Need for hierarchy	+	++	++	0	++
General feeling of tension	-	++	0	+	0

++ = concerned about this issue, + = acknowledges this issue, 0 = no mention of this issue, - = not concerned about this issue, -- = denies that this is an issue

Translating the stakeholder perspectives to the five earlier defined issues provides us with the insight that some perspectives are more concerned about governance issues than others. Moreover, not only the general governance perception differs but also the specific issues that the stakeholders perceive or don't perceive.

Factor 2 is actually worried about all of the governance topics, while Factor 1 on the contrary thinks that most things are running smoothly the way they are. This is an essential notion as parties that loaded high on Factor 1 are influential parties in decision-making processes in the airport region. Factor 4 is quite neutral about most potential governance issues and is more focused on substantive topics.

The fact that all five perspectives have a different level of problem perception and a different problem focus makes that it is difficult to speak of issues in a general sense. Therefore, the often made pre-assumption in many policy reports that the governance in the Schiphol airport region is problematic is too short-sighted as this depends strongly on the chosen perspective.

In the following all five issues will be discussed consecutively.

8.1 Inefficiency Due to Fragmentation and Redundancy

This research had set the goal to find out whether the current policy environment in the Schiphol airport region with a large amount of collaborative governance bodies suits the increased interconnectedness of city and airport or whether this fragmentation and redundancy rather leads to inefficiencies. With the knowledge of stakeholder perspectives that we now have this question can be answered.

Several of the interview respondents expressed a negative view on the overlap of governance bodies in the Schiphol airport region in the 18 pre-interviews. Therefore Chapter 5 concluded that stakeholders and experts perceive rather the negative effects of the governance fragmentation and redundancy than the possible positive effects. The Q-analysis in Chapter 7 somewhat nuanced this view by showing that not all perspectives are as worried about this inefficiency (Table 16). Mostly respondents who load high on Factor 2 and 5 perceive inefficiency due to fragmentation and redundancy as a major problem of regional governance.

However, it is not to be expected that this perceived inefficiency will be improved any time soon. Both stakeholders in Factor 2 as those in Factor 5 show a high distrust towards current regional collaborative bodies in general. Due to this sceptic approach it is questionable whether any structural changes (e.g. abolition/merger of governance bodies, introduction of overarching governance bodies etc.) in the existing governance structure can make a significant difference on their negative view of regional governance.

Even if structural governance changes would improve the trust that respondents have in the efficiency of regional governance, it is still unlikely that more changes can be decided on next to the changes that are already on their way in the upcoming year: the abolition of the BFS, merging the CROS and Alders Table and replacement of the City Region by a regional transport authority. Two other options of governance changes that were proposed to the respondents in this research - the implementation of a metropolitan board or a regional development company - show very mixed results between the stakeholder groups. The Q-statements demonstrated that before structural changes can be made all five perspectives need to be aligned. Therefore, the chances are low that a decision can be made on other structural changes on the short term without an additional tiresome and long-lasting negotiation process.

Moreover, even though the transaction costs of structural governance changes are great, one can wonder how much effect these changes actually have on policy outcomes. While the abolition of the BFS, the merging of CROS and Alders Table and the replacement of the City Region by a regional transport authority will probably reduce some organisational inefficiencies, these specific changes will

not necessarily improve the stakeholder perception of the policy-quality by these bodies. This is mainly due to the fact that the changes have little effect on the parties that are involved in policy making or the themes that are discussed. Both the involved stakeholders as their agenda topics are so institutionalised that if changes take place at all, this happens very incrementally. This common characteristic of policy-making was already described by Lindblom as the 'science of muddling through' in 1959 (Lindblom, 1959).

Solutions of better integration of decision-making in the Schiphol airport region should therefore not be further sought in rigorous structural changes, but rather in incremental substantive changes. By better aligning themes that are now discussed in separate governance bodies the quality of the current policy outcomes can be improved. As Salet and Thornley (2007, p. 191) already aptly mentioned: governance problems are often not in the fragmentation of policy actors, but in the disconnectedness of learning practices and policies.

Therefore, governance improvements are not to be found in the abolishment of several governance bodies or the establishment of several overarching metropolitan collaborations. It is in the acceptance of a certain level of fragmentation and redundancy that is inherent to governance, while constantly looking for new methods of organising connectivity, enrichment of the agenda and the involvement of a more diverse range of stakeholders with innovative ideas into policy-making processes.

In order to make this conclusion more concrete, the focus will now shift specifically to the five airport-city interface themes discussed throughout this report. It can be concluded that most stakeholder perspectives acknowledge the importance of each of these interface themes in governance bodies (Table 17). The ratings in Table 17 are based on the factor scores of each perspective on statements that have to do with that interface. If statements related to that interface were amongst the statements with the lowest or highest scores (+5, -5, +4, -4) for that Factor, it has been awarded a '++', et cetera. Statements with neutral scores can both be interpreted by saying that that perspective is neutral about that interface theme, or by saying that that Factor believes that that interface theme is overrated or even not important at all. The differentiation between these interpretations was made by going through the transcripts from the Q-sort sessions and analysing the argumentation and comments.

TABLE 17: IMPORTANCE OF INTERFACE THEME FOR EACH PERSPECTIVE

Interface themes (governance bodies)	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Land Use (BFS, AAA, AMA)	++	++	++	++	++
Infrastructure & Transport (SRA, AMA)	++	+	++	++	++
Economic Development (BFS, AAA, AMA, AEB)	++	+	++	++	++
Sustainability (BRS, CROS, Alders, AMA)	0	++	0	0	+
Noise & Safety (BRS, CROS, Alders)	-	++	++	+	++

++ = very important interface theme, + = important interface theme, 0 = neutral about this interface theme, - - = overrated interface theme, -- = not important interface theme

This table shows that the topic of noise and safety is perceived as somewhat overrated by Factor 1, something that was already apparent in the analysis of the five perspectives in Chapter 7. But most importantly Table 17 shows that the most underrated airport-city interface topic of the Schiphol airport region is sustainability. Therefore, in this theme is the greatest opportunity for the substantial enrichment of regional governance.

The fact that many of the perspectives have a neutral score on the sustainability theme does not mean that stakeholders are against sustainable initiatives. In the contrary, during the Q-sort sessions it could be observed that in the beginning of the session the sustainability statements were always mentioned as to be important and put in the high-scoring ends of the Q-sort board. However, as time progressed and more themes came to the fore, it became evident that sustainability does not have the priority for most stakeholder groups, as those statements disappeared towards the more neutral middle. Respondents that scored high on Factor 2 and some of the Factor 5-respondents were the only respondents that repeatedly gave sustainability the priority over other themes.

This indifference to sustainability amongst most stakeholder perspectives has led to the fact that many sustainability topics are not discussed in the current governance processes. The sustainability aspect that is discussed through the BRS, CROS, Alders and AMA mainly concerns the quality of the living environment, which practically often again comes down to noise hindrance. This means that currently predominantly the negative influences of the airport on its environment are discussed. However, a comprehensive sustainability strategy for the region is lacking and therefore the opportunity to use the central role of Schiphol to connect flows of water, energy and waste is not used to its full potential.

The merging of the CROS and Alders Table into a new Environmental Council brings a window of opportunity to enrich the regional sustainability agenda with more sustainability topics. Moreover, to ensure that decision-making in the Environmental Council will lead to substantially different outcomes than with the CROS and Alders Table, it is important to more actively involve parties into the process that load high on Factor 2, the Sustainable Change perspective. Many of these parties are currently outsiders of regional policy processes, such as the Society for Nature and Environment, Delta Project Development or local farmers. A more active involvement of such parties can make sure that sustainability does not make place as easily for other regional topics as it does now.

Rethinking the stakeholders that are involved in governance bodies is not only a good idea when it comes to sustainability, but this goes for all regional governance bodies. Current collaborations are generally too much focused on public parties and do not differentiate their involvement sufficiently. This notion builds a bridge to the four other governance issues in the Schiphol airport region discussed in this research and how these can be improved from a stakeholder perspective.

8.2 Lack of Democratic Principles

Even though the lack of democratic principles is an often mentioned weakness of the shift from government to governance in literature, most respondents in this research do not perceive this as a large issue in the Schiphol airport region (Table 16). Stakeholders who load high on Factor 2 are - again - most concerned about this issue. The distrust in the democratic legitimacy of regional decision-making has increased due to the large amount of semi-public organisations that have been established in the last decades, which has made the division between public and private roles in the region less clear.

However, even though Factor 2 is the only perspective that perceives this issue, this point of view is not to be denied as the lack of democratic principles is a fundamental criticism that when brought into question can remove the complete credibility of process outcomes.

Then again, a certain lack of democratic principles is inherent to a governance approach to decision-making as policy-making responsibilities are shifted from elected politicians towards a combination of

local administrators and private parties that might be less representative for stakeholder viewpoints and have a less clear defined accountability.

As the lack of a democratic legitimacy is endogenous to governance arrangements, it is essential that the processes towards decision-making are as transparent as possible to win over the trust of stakeholders that are not involved in these processes. This transparency is something that can be improved in the Schiphol airport region. For outsiders it is difficult to find an overview of the existing governance arrangements in the Schiphol airport region. Moreover, even after these are found, it is hardly impossible to find out:

- How the bodies are exactly organised and financed;
- Why certain decisions have been made in the past for the abolishment or start-up of new governance bodies;
- Where the responsibilities of a certain body start and where they end;
- How the different governance bodies collaborate amongst one another.

Especially non-transparent is the representation of parties in the governance bodies. Paragraph 4.3 already shortly questioned the exact public involvement in the eight collaborations that are discussed in this report. In some cases a municipality is involved in a certain collaboration, while its neighbouring municipality is not. Why these lines are drawn where they are drawn is often unclear. An example of this will now be discussed, illustrated by Figure 13 (an enlargement of Figure 11).

FIGURE 13: EXAMPLE OF HAPHAZARD PUBLIC INVOLVEMENT IN COLLABORATIVE BODIES

The municipality of Uithoorn participates in regional collaborations that concern airport-metropolitan interfaces through four governance bodies: Amsterdam City Region, Amsterdam Metropolitan Area, the Schiphol Regional Consultative Committee (CROS) and the Regional Authorities governing Schiphol (BRS).

Its neighbouring municipalities Nieuwkoop and De Ronde Venen are not seen as a part of the greater Amsterdam region and are therefore not involved in the Amsterdam City Region or Amsterdam Metropolitan Area collaborations. This can be explained by the fact that Nieuwkoop and De Ronde Venen are located outside of the Province of Noord-Holland, which would make city-regional collaboration more complicated. However, the municipality of Nieuwkoop is invited for the two other collaborations that Uithoorn also participates in: CROS and the BRS, while the municipality of De Ronde Venen is not involved in any regional airport-city collaborations at all. This exclusion of De Ronde Venen is extra peculiar if one considers that other municipalities that are located further away from both Amsterdam as Schiphol are involved in these collaborations, e.g. Stichtse Vecht (CROS) or even Utrecht (both CROS and BRS).

This example shows that if one assumes that managing the interfaces with municipalities that are located close to the airport is most essential, because these are the ones experiencing most benefits as well as most detriments of airport proximity, one can question the current municipal involvement of several existing governance bodies.

Another peculiarity is the haphazard involvement of private companies in some of the governance arrangements. For example in the Amsterdam Economic Board (AEB) all interested companies can join in as a partner, which has led to a large amount of collaborating parties (Appendix A). Even Schiphol actively participates in the AEB, which means that Schiphol as private party can advise the municipality of Amsterdam about regional economic investments while they obviously also have a specific interest in these investments. Even though countless amounts of companies are involved in the AEB, the other governance bodies analysed in this research hardly involve non-aviation commercial parties in their collaborative processes. Only the Amsterdam Airport Area has involvement of some private actors. These are mostly parties that are involved in real estate processes such as development companies and financial institutions, but also one other company: a logistics company which is located in the Schiphol area – IJS Global. Why this is the only local company that is involved in regional policy-making processes is nowhere to be found.

Thirdly, next to the representation of public and private parties in the governance bodies, one could also question the representation of residents in those same bodies. This issue has already been raised by Ferrie Forster (2013) after an analysis of the CROS and the Alders Table collaborations. The CROS and the Alders Table both involve inhabitants of the region in their processes, but there is no real democratic procedure on how these citizens are chosen. Quite often inhabitants participate that experience nuisance from the airport, while inhabitants with a more positive attitude towards the airport are not triggered to participate (Forster, 2013). This could also be explained due to the fact that citizens are mainly involved in collaborations which are focused on nuisance of the airport on the surroundings and not in the arrangements which discuss the benefits of the airport and general development of the region.

Undeniably, the emergence of governance arrangements is a dynamic, fluid process and usually does not follow strictly designed rules or rational arguments. If one would design the complete governance system from scratch it would probably look very different and it is therefore not unusual that the stakeholder involvement in the collaborative bodies does not immediately make complete sense to an

outsider. This seemingly haphazard involvement of stakeholders does not necessarily have to form an issue.

However, as more and more policy-making tasks are delegated to regional collaborations, which are inherently less democratic, it is essential for decision-making processes to stay transparent. In order to reach this governance bodies need to adapt better communication methods to the outside world about the choices they make or do not make. A large opportunity for improving the credibility of regional decision making in the Schiphol airport region is therefore to provide a clearer overview of these regional policy processes so that transparency and accountability levels can be raised and there will be less ground for accusations of nepotism. Moreover, this can provide guidelines for newly to be set up collaborations in the future.

8.3 Lack of Comprehensive Decision-Making on Land Use Themes

As becomes clear from both Table 16 and Table 17 the majority of stakeholders perceives land use as a very important airport-city interface, but the general feeling is that a comprehensive strategy on land use is currently missing in the Schiphol airport region.

When it comes to commercial locations spatial policies in the Schiphol airport region are reasonably aligned. Because of the existence of the BFS and SADC at least a part of the greater Amsterdam region has been used to consider a large spatial scope in decision-making already for over 25 years. Moreover, the Plabeka collaborations of recent years have forced municipalities to place the greater good of the region over their individual profits when it comes to office locations. Whether or not the Plabeka agreements are sufficient to bring balance to the commercial real estate market or whether they have been fully adapted into local policy is debated by some, but at least local administrators in the region have been collaborating on a scale that is appropriate for such issues.

When it comes to housing and other land uses, however, local policies and regional visions are much less integrated. While some attempts are made to set up regional visions (e.g. the national structural vision SMASH), the involvement in the creation of such visions is often limited and therefore many stakeholders perceive that it does not represent their ideas. Moreover, these structural visions are only meant as strategic guidelines and are not enforceable, which makes that local administrators still have the final say when it comes to land use strategies.

Very recently the Government has also presented an additional structural vision: RRAAM, which contains a vision on the development of the Amsterdam-Almere-Markermeer region. A large issue that is treated in this vision is the development of 60,000 dwellings in the Almere region to cope with the tension on the housing market in Amsterdam. On the other hand, the existing structural vision SMASH considers the possibilities in the surroundings of Schiphol to cope with the tension on the Amsterdam housing market. As both strategies deal with the same housing system and these visions have so much influence on each other, it is odd that no integration has been made between the two.

Moreover, the agreements that have been made by the Alders Table foresee a growing role for Lelystad Airport in the future. This will most likely have a large influence on the travel and settling behaviour of both visitors as inhabitants in the region. While the current most encompassing regional plans of Amsterdam or Schiphol end at Almere, it is not improbable that in the future airport-metropolitan interfaces will have a much wider influence and also the municipality and the airport of Lelystad will have to be considered as a part of the Amsterdam region. When it comes to public transport, this development has already partly been taken into consideration by expanding the train

network between Schiphol and Lelystad through the OV SAAL-project, for which the national Government has made €1.4 billion euro available for the next 6 years (Rijksoverheid, n.d.). However, by reducing travel times between Schiphol and Lelystad, the need for a comprehensive consideration of spatial planning issues with a larger scope will become even more necessary.

A large opportunity for the Schiphol airport region therefore is in the alignment of all the local and regional visions on future land use, taking into consideration a larger scope up to Lelystad. The integration of the existing visions needs to take place with the involvement of local administrators in order to be able to come to implementable solutions. An active role in this alignment can be taken on by the Provinces of Noord-Holland and Flevoland. The stakeholder analysis in this research showed that many stakeholders perceive the Province as a weak party that does not have much influence on regional processes. By a close collaboration on land use issues the two Provinces of Noord-Holland and Flevoland can give a good example for local administrators and take on a more pro-active role in bringing parties together on regional spatial decision-making. This can also partly solve the need for hierarchy that is discussed in the next paragraph.

8.4 Need for hierarchy

The issue that is most shared amongst stakeholders from different perspectives is the need for more hierarchy (Table 16). Then again, the five perspectives have very different opinions on the introduction of a metropolitan board in the AMA, so this is not expected to bring the hierarchical intervention that is needed on a short term. On the involvement of the national Government the stakeholders are much more aligned. This also came to the fore when analysing the statements with most consensus in Paragraph 7.2; almost all respondents disagreed very strongly with the statement that the national Government should interfere with Schiphol policy as little as possible (Factor 1: -4; Factor 2: -2; Factor 3: -5; Factor 4: -2; Factor 5: -5).

While the respondents do believe that the Government is currently too far away from the regional governance processes in the Schiphol airport region, on the other hand the statement that many important decisions happen through short lines with the ministry of I&E is the most agreed on statement (Factor 1: 2; Factor 2: 5; Factor 3: 1; Factor 4: 1; Factor 5: 3). This suggests that stakeholders would prefer a more formalised role of the national Government in the region.

However, the strong expressed need for external hierarchical control should also be seen as a natural response against the increasing reach of governance in the airport region. Especially in times of economic downturn a need for a strong Government is often seen. It is expected that if the national Government involves too much with the Schiphol region, an opposite shared perception amongst stakeholders will arise that asks for more regional autonomy. Therefore, there is a need for more hybrid forms of Government involvement, in which the national Government provides enough steering for regional governance outcomes to flourish, without interfering too much.

Currently, on the one hand the Government has the final responsibility for many Schiphol-related topics, while the main discussions about regional development take place in the region itself. The Government has smartly delegated the difficult pain in the neck-file of Schiphol to the region, but has not provided the regional collaborative bodies with the final decisive power or resources. Of the eight collaborative bodies reviewed in this research currently the national Government only participates in the Alders Table with representatives from the ministry of Infrastructure and Environment. The ministry of Economic Affairs is not involved in any of the regional collaborations, while they also have an important interest in the economic development of the Schiphol airport region.

A more active formalised role of both the ministries of I&E as Economic Affairs in the regional governance bodies can close the current gap between regional governance and the Government and prevent that the influence of informal personal connections and short lines between aviation sector or other insiders and the Government becomes too large. It is therefore important that representatives of both ministries will be involved in the future Environmental Council and potentially also in other regional collaborations that can benefit from a more active State participation. This is definitely not the case for all regional collaborations. The BRS, for instance, is meant as a representative organ of regional administrators and ministry-representatives would be out of place in this collaboration. The same goes for regional collaborations such as the City Region of Amsterdam or the Amsterdam Metropolitan Area. The ministry taking up an active role in these collaborations would come across as the undermining of the autonomy of the Amsterdam region. However, collaborations such as the Amsterdam Airport Area, meant to attract international companies to the Netherlands, can definitely benefit from a closer connection to the national Government.

8.5 General Feeling of Tension

The general feeling of tension due to previous problems between stakeholders and due to future uncertainties is mainly felt by respondents from the Sustainable Change-perspective and the Government and Market-perspective (Table 16), which has made these stakeholders somewhat sceptic regarding regional governance collaborations. Whether this scepticism is justified is questionable as in general there is currently a positive attitude in place towards regional collaboration. The mere fact that after a long period of governance standstill 1) regional collaborative bodies have been able to come to implementable decisions (e.g. the advices by the Alders Table) and 2) there are upcoming shifts in governance arrangements are good signs for the future of collaboration in the Schiphol region. This shows exactly the collaborative climate and flexibility that is needed in multi-level governance systems.

While in previous research, such as the one by Boons et al. (2010) the sense of tension and distrust was mentioned by many respondents, the recent results of the Alders Table that broke through the everlasting battle about the development of Schiphol and its noise pollution seem to have brought more peace to the actor arena. It has shown that governance arrangements do not only results in the "incremental reformulation of the existing policy philosophy" (Boons et al., 2010), but are also able to lead to implementable policy results and long-term strategies for the region.

Even though this research has shown that the governance issues in the Schiphol region are not as large as sometimes portrayed in other reports, amongst some actors still an image of tension, disagreement and standstill exists. It is up to policy makers in the airport region to break through this image by emphasising the recent achievements of governance bodies in the Schiphol region and the future opportunities of further regional collaboration on airport-metropolitan interfaces.

The negative image that some stakeholders have on decision-making in the Schiphol region is partly also caused by policy makers themselves as they sometimes make the mistake to frame discussions in the Schiphol region from the traditional economy vs environment-dichotomy, hereby only enhancing the contradictions. As there are at least three more perspectives to look at the Schiphol-region, stakeholders that subscribe to these other perceptions will feel left out in discussions when policy makers focus too much on economy or environment and neglect the other regional interfaces.

The viewpoints of stakeholders in the traditional economy-coalition and the stakeholders in the environment-coalition are much less conflicting than expected. Moreover, this classical divide of the stakeholders in proponents and opponents of the development of the airport often overlooks that stakeholders do not always have the perspective one would expect. This research has exposed that there are for example also economically focused inhabitants and sustainably focused project developers. In order to get rid of the many misconceptions, it is therefore essential that policy makers stop thinking from these old prejudices themselves.

9 CONCLUSION AND RECOMMENDATIONS

This chapter brings all the research results together to answer the main research question (Paragraph 9.1), to provide policy makers with recommendations (Paragraph 9.2) and to conclude on possibilities for future research (Paragraph 9.3).

9.1 Conclusion on Governance Issues and Stakeholder Perspectives

The expanding complexity of airport-metropolitan interfaces in the Schiphol airport region (Chapter 2) has led to the formation of a large amount of non-hierarchical governance arrangements (Chapter 3 and 4). Several authors have criticised this complex decision-making system and its inherent overlap of functions and responsibilities. However, to know whether one can truly speak of governance issues, a better understanding of stakeholder perceptions on current decision-making processes was needed. Therefore, this study was set out to explore issues and stakeholder perceptions regarding Schiphol-Amsterdam interface governance and has provided several insights that can assist policy makers in the Schiphol airport region.

Governance literature names three main issues of the governance approach:

- A large amount of collaborative bodies will often have redundancies and fragmentation, which can lead to inefficiencies;
- Delegating decisive power to public-private collaborations can lead to a lack of democratic principles;
- Governance bodies will often still need a shadow of hierarchy for decisions to take place and be implemented.

Based on 18 qualitative interviews with experts and stakeholders it was concluded that all these three issues are also recognised in the governance of the Schiphol airport region. Moreover, two additional region-specific governance issues were identified:

- A lack of comprehensive decision-making on land use themes;
- A general feeling of tension.

However, whereas this list of issues provides interesting information for policy makers, it does not show where the priorities are or in which direction to look for opportunities to improves these issues. To get a better insight the second part of this research continued by asking 41 stakeholders to quantify their opinion. With the help of the Q-methodology five different ways of looking at decision-making in the Schiphol region were identified:

- Factor 1 (the Aviation Growth-perspective) sees the airport as a growth engine of the metropolitan area. This old-boys network of dominant parties in the airport region does not perceive the current governance as problematic, but does see opportunities in the establishment of more formalised metropolitan governance bodies;
- Factor 2 (the Sustainable Change-perspective) is very critical about current decision-making processes as they lack in transparency, do not involve enough parties and are not sufficiently focused on sustainability, environmental and noise-issues in the Schiphol region;
- Factor 3 (the Economic Growth-perspective) also pursues the economic development of the Schiphol region, but believes that a strong national Government should provide strict rules for

noise and land use policies in order to protect the inhabitants from the often profit-driven municipalities;

- Factor 4 (the Governance and Market-perspective) does not perceive many issues in the way governance is currently organised. This perspective is very focused on regional collaboration and the involvement of sufficient parties into decision-making processes. The national Government should provide the framework, but public-private collaborations in the region will do the rest;

- Factor 5 (the Government and Market-perspective) perceives that there are currently too much regional collaborations; it prefers decision-making by the national Government, provinces and municipalities. However, private parties should also be involved in regional decisions and the market should receive more freedom and be less regulated than is currently the case.

Even though these five different discourses have a very different focus and diverging priorities, an important notion is that the analysis showed that there is also a large common understanding between the respondents. All five perspectives for example acknowledge the importance of Schiphol and its network for the regional economy. This common base between the perspectives is often overlooked in policy reports that just focus on contradictions.

However, although this research showed a shared understanding between most stakeholders, when the five perspectives are projected onto the five governance issues it is evident that not each perspective acknowledges the same issues. Therefore, it is too short-sighted to speak of a problematic governance environment, as the extent of the problem perception and the exact issues that are perceived differ strongly depending on the chosen perspective.

The issue of inefficiency due to fragmentation and redundancy is mainly recognised by Factor 2 and Factor 5. However, respondents from these perspectives are generally sceptic about regional collaboration. Whether any structural changes (e.g. abolition/merger of governance bodies, introduction of overarching governance bodies etc.) in the governance arrangements can improve this, is questionable. Besides, several structural governance changes are already planned; this year the region decided on the abolishment of the BFS, the merge of the CROS and the Alders Table into an Environmental Council and the replacement of the City Region of Amsterdam by a regional Transport Authority. Additional structural changes that were discussed in this research with the stakeholders, such as the introduction of a metropolitan board or a regional development company showed mixed results amongst the five perspectives. Therefore, it is not expected that such changes can be implemented on a short term.

Moreover, the structural governance changes that have been made in the region in recent years show that new collaborative bodies often still involve the same parties and discuss the same topics as the old collaborations they replace. In other words: the stakeholder perspectives indicate that the real issue is not in the overly large quantity of decision-making processes, but instead in the relatively poor perceived quality of their outcomes. The opportunities for the improvement of the current governance are therefore not to be sought in rigorous structural changes, as a certain level of fragmentation and redundancy is inherent to governance and this should be accepted. The opportunities are rather in incremental substantive change by constantly looking for new methods of organising connectivity, enrichment of the agenda and the involvement of a more diverse range of stakeholders with innovative ideas into policy-making processes.

Before this conclusion can be translated to concrete recommendation, it is important to stress the following:

The fact that the governance in the Schiphol airport region has been able to come to several important decisions in the last few years shows that the current governance is already able to lead to implementable policy results and long-term strategies for the region. Moreover, the application of the Q-methodology in this report has shown that when a large scope is taken and stakeholders are asked to discuss a wide range of topics, stakeholders will be able to find some common ground, even on such an often disputed topic as Schiphol airport. The recommendations in the next paragraph are thus not recommendations to solve some kind of large governance problem, but recommendations for a governance system that can be improved.

9.2 Recommendations on Opportunities for Improvement of Airport-Metropolitan Governance in the Schiphol Airport Region

The analysis of stakeholder perspectives has shown that there is currently much more agreement amongst stakeholders on substantive topics than on governance topics. This is probably due to the fact that previous years have had an over-emphasis of substantive topics on the regional agenda. Now the region to a certain degree agrees on <u>what</u> they want to reach due to for example the Alders Table agreements, the most important task is to reach more agreement on <u>how</u> to reach these common goals. Therefore organisational matters should get a more prominent spot on the regional agenda. This paragraph will give policy makers opportunities for improvement of regional governance that have come from this stakeholder-driven research.

The conclusion of this research has stated that opportunities for governance improvement are in 1) new methods of organising connectivity, 2) enrichment of the agenda and 3) the involvement of a more diverse range of stakeholders with innovative ideas into policy-making processes. The synthesis in Chapter 8 has combined the analysis of governance issues and stakeholder perspectives to be able to provide concrete recommendations on how these three improvements can be achieved:

9.2.1 Opportunities for organising connectivity

The opportunities for new methods of organising connectivity are currently largest on the domain of land use. The majority of stakeholders perceive land use as a very important airport-metropolitan interface, but the general feeling is that a comprehensive strategy on land use is currently missing in the Schiphol airport region. As land use in the Schiphol airport region is extra complex due to noise and safety restrictions, a strong regional collaboration on this interface theme is crucial.

While commercial spatial developments are relatively aligned in the region due to collaborations such as BFS and Plabeka, strategies on other land uses are not sufficiently perceived in the greater context of the Schiphol airport region yet. Even though the national Government has recently published two regional structural visions: SMASH (focus on Amsterdam-Haarlemmermeer) and RRAAM (focus on Amsterdam-Almere), these visions are not created with sufficient stakeholder involvement and strangely enough are not integrated well with each other. As both Almere and Haarlemmermeer are appointed as important locations for solving the tension on the Amsterdam housing market, there is a need for a comprehensive land use vision for the greater Amsterdam region that incorporates at least also both these cities. Moreover, as the role of Lelystad Airport will grow in the future, the travel and settling behaviour of both visitors and inhabitants of the Amsterdam metropolitan region will most

likely change. A large opportunity for the Schiphol airport region is therefore in the alignment of all the local and regional visions on future land use, taking into consideration a scope not only up to Almere, but all the way up to Lelystad. A pro-active and collaborative attitude of the Provinces of Noord-Holland and Flevoland can help to achieve this.

9.2.2 Opportunities for enriching the regional agenda

The stakeholder analysis has shown that opportunities for enrichment of the agenda are greatest when it comes to sustainability topics. Most of the stakeholders currently involved in the governance processes prioritise other themes above sustainability. If sustainability is discussed at all, this usually concerns the topic of liveability in the Schiphol airport region, which essentially again comes down to noise hindrance. While the negative issues that the airport has on its surroundings are being discussed, the opportunities for using Schiphol's central location to connect flows of water, energy and waste are underexposed in the current governance context. The merge of the CROS and the Alders Table into the Environmental Council should therefore be seen as a window of opportunity to enrich the regional agenda. By involving parties into the Environmental Council that are now often outsiders of regional policy processes, but load high on the Sustainable Change-perspective (e.g. Society for Nature and Environment, Delta Project Development or local farmers), sustainability will not make place as easily for other regional topics as it does now.

9.2.3 Opportunities for involving a diverse range of stakeholders

Finally, also several opportunities for the involvement of a more diverse range of stakeholders deserve the attention of policy makers in the Schiphol airport region.

Next to the involvement of more sustainability-oriented parties into regional collaborations, also a more active role for the national Government in some of the collaborative bodies can be considered. Already in 2008 (Raad V&W, 2008) one of the advisory boards of the Ministry of Infrastructure opted for the national Government to take the lead in shaping the future of the airport. Five years later, the report by the Council for the Environment and Infrastructure on governance of the airport region (2013) concluded the same and also recommended a more active Government approach.

Similarly, among all the perspectives in this Q-methodology study, there is also a call for an active Government with clear intentions that sets out clear goals and boundaries. The Government has smartly delegated the difficult pain in the neck-file of Schiphol to the region, but all stakeholders express a strong need for more hierarchy in regional collaborations. Currently the national Government only participates in regional collaborations through representatives from the Ministry of I&E at the Alders Table. A more active formalised role of both the ministries of I&E as Economic Affairs in the regional governance bodies can close the current gap between regional governance and the Government and prevent that the influence of informal personal connections and short lines between aviation sector or other insiders and the Government becomes too large. It is therefore important that representatives of both ministries will be involved in the future Environmental Council and potentially also in other regional collaborations that can benefit from a more active State participation, such as the Amsterdam Airport Area.

Another opportunity for diversifying stakeholder involvement in regional collaborations is by inviting more local companies to participate in the discussions. Except for the Amsterdam Economic Board, almost none of the other governance bodies analysed in this research involve non-aviation commercial parties in their collaborative processes. Only the Amsterdam Airport Area has involvement of some private actors and involves one large logistics company from the Schiphol airport region: IJS Global.

While private involvement is seen as a positive development, involving just one private party is not sufficient and can be perceived as favouritism by outsiders of the processes. It is essential that other private parties from the airport region feel invited to participate in decision-making processes as well.

Next to the reconsideration of the involvement of the national Government and private parties, another opportunity is in the reconsideration of the involvement of municipalities in the collaborative bodies. Currently, in some cases a municipality is involved in a certain collaboration, while its neighbouring municipality is not. Why these lines are drawn where they are drawn is often unclear. The same goes for citizen involvement in the regional collaborations. As there are no democratic elections to select stakeholder representatives, it is essential that for outsiders of the process it is clear why certain citizens are involved.

As regional governance processes inherently lack democratic principles, transparency is crucial and governance bodies should adapt better communication methods to the outside world about the choices they make or do not make, so that transparency and accountability levels can be raised and there will be less ground for accusations of nepotism.

Considering all the opportunities for improvement mentioned in this paragraph can assist policy makers to improve the stakeholder perceptions of the current governance.

Finally, even though this research amongst a select stakeholder group has shown that the governance issues in the Schiphol region are not as large as sometimes portrayed in other reports, amongst some actors still an image of tension, disagreement and standstill exists. It is up to policy makers in the airport region to get rid of the many misconceptions by stopping to think from these old prejudices themselves. The rich overview of stakeholder perspectives provided in this research can be used by policy makers to form strategic coalitions based on the analysis of which stakeholders correspond with which of the five different perspectives. Moreover, framing issues or solutions with the help of the five perspectives in this research can be a strategic tool for policy makers to appeal to certain perspective groups.

9.3 Recommendations for Further Research

This report has left some question marks on topics that were not the focus of this research, but would provide a good baseline for further studies:

- The analysis of eight collaborative bodies in the Schiphol and Amsterdam region in Chapter 4 has shown a complex pattern of participants in these collaborations. The involvement of public bodies, private parties and citizens in these bodies can come across as haphazard for outsiders of the processes. Additional research can be performed to get a better insight in which reasons (e.g. geographical, political, economic) have played a role in the formation of the membership composition that is currently in place. The results of such a research can be communicated to outsiders of the collaborative bodies in order to make these processes more transparent. Moreover, critically assessing current rules for invitation of certain actors into regional collaborative processes can help to align these rules in order to have more regional consistency for current and newly to be set up collaborations.

- One of the conclusions of this report entailed that solutions for integration in policy-making should rather be sought in organising connectivity of policies and learning practices between

existing bodies than in large institutional changes. This research has made clear that stakeholders perceive land use to be the interface theme that can benefit most from such integration. However, a good overview of all local, regional and national spatial visions for the Schiphol airport region is currently lacking. It is therefore unclear how much current land use plans are overlapping or contradicting each other. The creation of such an overview can give more insight into which spatial policy processes are currently insufficiently connected.

- The large planned growth of Lelystad Airport in the future is expected to change the functioning of many systems in the region due to alterations in traveling and settling behaviour. As this change will have some bearing on the scope of regional policy making, it is necessary to better explore this future influence.

- The analysis of the Q-sort showed that two governance decisions that have been made this year, such as the abolishment of the BFS and the introduction of a regional transport authority were amongst the topics with most consensus amongst all stakeholder groups. It was assumed in this research that these decisions could be made exactly because of this large consensus. However, the possibility also exists that this principle works the other way around and the observed consensus only exists as the decisions had already been made anyway and therefore stakeholders did not have another choice but to agree with it. Moreover, it might be the case that no consensus between all perspective groups is needed for decisions to take place if one of the perspectives contains stakeholders with most decisive power. In this research for example it can be observed that many of the stakeholders from organisations that are involved in influential regional governance bodies subscribe to Factor 1. The mechanism behind the amount of consensus needed for a decision to be adopted deserves more attention.

- The stakeholder perspectives analysed in this report form a good base to perform further stakeholder research. Several Q-methodological studies in the past (Cuppen, 2012; van Eeten, 2001) have shown that bringing the results of such a study back into the stakeholder arena can provide interesting results. Extending this research by organising a stakeholder meeting in which the five perspectives are discussed can help to:
    o Obtain an even richer view of the perspectives and the underlying arguments;
    o Confirm whether stakeholders recognise the perspectives that they subscribed to;
    o Better explain the differences between different stakeholders from the same organisation;
    o Lead to better understanding and more agreement in the stakeholder arena.

- Finally, the results from this Q-method can form a reference point for a similar research to be performed in the future. This can be used to map shifts in perspectives and above all to see what kind of impact all the upcoming governance changes have had on stakeholder perceptions.

10 REFLECTION ON RESEARCH CONTENT AND PROCESS

This chapter firstly provides a final reflection on and discussion of the research results in Paragraph 10.1 and thereafter a reflection on the research process in Paragraph 10.2.

10.1 Reflection on Research Content

The goal of this research was to identify whether stakeholders perceive issues in the current way the interfaces between Schiphol and Amsterdam are governed and to conclude what this knowledge would mean for opportunities for the future improvement of this regional governance. In order to do this the output of both qualitative (interviews) as more quantitative methods (Q-methodology) were used. Both types of research methods have their proponents and opponents. Therefore, this paragraph critically assesses whether the application of the Q-methodology in this research in order to reach an answer to the research questions.

In the past some authors have expressed criticism towards the Q-methodology (Brown, 1997; Weimer, 1999), This criticism questions the subjective nature of the method and whether the method is able to provide more insights than mere qualitative interviews.

Of course the Q-methodology provides results for only a particular group of respondents and is therefore not able to generate generalisations for the complete population, but this is also not the purpose of the method. In this particular case it was far more interesting to get an in-depth view on the perspectives of a small, yet very important group of stakeholders. Therewith the method was a much better fit than any large-scale R-based research.

Moreover, the richness of the results obtained by the Q-methodology in this research unquestionably shows that the method is able to provide more insights than solely qualitative interviews. Firstly, this is because the Q-methodology provides a framework for obtaining more in-depth qualitative information than conventional interviews. This qualitative information is gathered in the pre-interviews, during the sorting processes and after the Q-sort sessions by constantly reflecting and asking the respondent questions about certain choices. Additionally, not only the quantity of qualitative information is large when applying the Q-methodology, also the quality of the obtained quotes is often better. As the respondents are involved in a game-like setting with statement cards, it has been observed that their politically correct mask seems to come off and they tend to be more sincere and out-spoken than in a traditional, less interactive interview setting. Secondly, next to the large amount and high quality of qualitative output, the Q-methodology obviously also provides tools to quantify the stakeholder-input. This quantification has proven to be essential for this policy analysis, as it was able to put the list of governance issues mentioned in the interviews into perspective. If this research had ended after the 18 pre-interviews, the output would be a list of expert and stakeholder-mentioned substantive and governance issues in the airport region. Of course this is interesting information for a policy maker, but it does not provide enough of a baseline to fall back on.

Despite the positive results of the use of Q-methodology in this research, of course some weaknesses in the used approach can be pointed out as well:

- The 18 pre-interviews for the definition of issues statements for the Q-sample were performed by the Better Airport Regions governance research team before this particular MSc thesis was initiated. In retrospect, not all statements were therefore as much relevant for this thesis. Many statements had to do with land use and sustainability, the most important themes within the

- Better Airport Regions-project. Herewith statements on other interface themes, such as infrastructure & transport were somewhat underrepresented. Moreover, no specific statements were included to specifically test the five overarching governance issues that were defined in this research. If this Q-sample would have been made specifically for the purpose of this research, statements would have been included to literally test the five overarching issues, such as: "There is a lack of a comprehensive decision-making on land use themes", "There is a general feeling of tension in the Schiphol airport region" etc.
- The respondents that were asked for the participation of this research were asked through connections of the Schiphol Area Development Company. Even though respondents of many different organisations participated, public parties and insiders of the process were somewhat overrepresented.
- Even though the final Q-sample was double-checked and tested, the formulation of some statements could have been better. When there is much consensus about a statement, this can be due to the fact that there really is a significant consensus about the topic in reality, but also because the formulation of the statement is not sharp enough. For example, statement 52 about the possibility of the existence of a public transport authority in 2020 had so much consensus that it did not significantly distinguish between any pair of factors at a P>.01 level and even not at a P>.0.05 level. While the actual idea behind the statement was to measure the participant's opinions on the ability of the region to collaborate on the topic of public transport, participants regarded the statement as a matter of looking into a crystal ball. "I guess a regional public transport authority would be a good idea, but how could I know whether it is possible to organise an authority for this on such short notice, I am not involved in these negotiations" (Respondent 25).
- Except for the experts and inhabitants of the airport region all respondents were asked to prioritise the statements from the viewpoint of their organisations and not from their personal opinion. However, the fact that individuals from the same organisation often subscribed to different perspectives shows that organisational positions are not well-known enough amongst all employees and/or that people have difficulties to make a distinction between personal and organisational viewpoints when priorities need to be made. Therefore one could question how much the Q-methodology is able to make statements about the perspectives of an organisation, as these organisations all consist of individuals who have different personal (political) preferences.

However, as Watts and Stenner (2012) have already stated: it is very natural to have things one would like to change, omit or include at the end of a Q-methodological study. But even with an imperfect Q-sample, a researcher can already find useful results.

The Q-methodology in combination with the qualitative desk research and interview transcripts from the pre-interviews have been able to provide a better understanding of the issues different stakeholders perceive and therewith this combination has successfully been able to reach the research goal and answer the research questions.

10.2 Reflection on Research Process

In the beginning of 2013 I was firstly introduced to Michel van Wijk and Ellen van Bueren of the Better Airport Regions-project and asked to assist the BAR governance research team in performing a Q-

study on the case of Schiphol. With only a few weeks of preparation and a brief literature study, I started assisting in the execution and documentation of the Q-sort sessions. The Q-analysis was useful for the BAR-project, but I was allowed to use it in my own thesis as well.

This meant that the research method was already fixed even before I had defined the exact scope of my own research. While I was analysing the interview transcripts and figuring out the mechanisms behind the Q-methodology, I was simultaneously still working on my literature study as well. In retrospect this meant that in some cases I had to do some reverse engineering in order to fit in my own research with the Q-sorts that were already performed, which of course is not the most ideal way of performing research. At a certain moment I therefore put the analysis of the Q-sorts on a hold, in order to first finish the first part of the research. After I had a better theoretical understanding, the analysis of the perspectives was easier as well.

On the other hand, even though it was not very practical that I started with the application of the Q-methodology already so early in my research, the fact that all the Q-sort interviews were already arranged by Michel van Wijk and I got to participate in many of them, was a great opportunity. If I was doing this research by myself, I would never be able to arrange and perform 18 pre-interviews and 41 Q-sort sessions with such interesting stakeholders within such a short period of time.

While at first when I realised that many statements in the Q-sample were on substantial topics as well, I saw this as a weakness in the added value of the Q-methodological research for my research that was particularly focused on governance. However, as time progressed and with help of my thesis committee I started to see this combination of substance and governance as inseparable, as one can hardly discuss the one without mentioning the other. Analysing both the interface topics as the governance topics helped to get a more complete overview of the stakeholder perspectives and also to add an interesting new insight that some perspectives agree strongly on substance, but disagree on governance. This would have not been possible without analysing the substantive statements as well.

During my research I had the opportunity to perform a 5-month internship at Schiphol Area Development Company (SADC). This was an interesting opportunity as it allowed me to be in the middle of governance processes in the Schiphol region and to learn much about the existence and functioning of many of the collaborative platforms. During this time I also assisted in the organisation of a conference on 'Logistics in the Amsterdam Metropolitan Area'. Even though this might not be exactly the topic of this thesis, it did put me in contact with many stakeholders in the region and let me experience the collaborative atmosphere that is currently in place. On the other hand, the assistance in the organisation of the conference and some other daily tasks at the SADC-office made that I was not always able to focus completely on my thesis while I was doing the internship. Nevertheless, I think that this thesis would not have come this far if I wouldn't have been able to experience a regional collaboration from the inside.

A final remark is that from the beginning on the focus of this research was very broad; it entailed all kinds of governance bodies of all types of interfaces that connect city and airport and the perspectives of as many possible stakeholders on this. If I would have made an early decision to focus only on a few governance bodies, only on one interface theme or on one type of stakeholders, this research would have been able to produce more concrete and in-depth recommendations. On the other hand, because of this wide scope this research has provided a very good general overview and connected several themes that previously were only studied separately. This makes this thesis a good handbook and reference point for policy makers as well as for further research.

REFERENCES

Alders, H., & Verheijen, J. (2012). Advies Alders en Verheijen over toekomst Alderstafel/CROS. Retrieved September 13, 2013, from http://crosnet.nl/

Amsterdam Economic Board. (n.d.). Clusters. Retrieved December 07, 2013, from http://www.amsterdameconomicboard.com/clusters

Appold, S., & Baker, D. (2010). When the Shoe Doesn ' t Quite Fit: Regulating Large Commercial Airports with Expanding Roles. In *Proceedings of the 12th WCTR World Conference on Transport Research* (pp. 1–26). Lisbon, Portugal.

Barry, J., & Proops, J. (1999). Seeking sustainability discourses with Q methodology. *Ecological Economics*, *28*, 337–345.

BAS. (2013). *Jaarrapportage 2012*. Schiphol.

Bontje, M. A. (2001). *The challenge of planned urbanisation*. Amsterdam study centre for the Metropolitan Environment.

Bontje, M. A., Musterd, S., & Pelzer, P. (2011). *Inventive City-Regions*. Farnham: Ashgate Publishing.

Bontje, M. A., & Sleutjes, B. (2007). *Amsterdam: History meets modernity*. Amsterdam: Amsterdam Institute for Metropolitan and International Development Studies, University of Amsterdam.

Boons, F., Buuren, A. Van, & Teisman, G. (2010). Governance of sustainability at airports: Moving beyond the debate between growth and noise. *Natural Resources Forum*, *34*, 303–313.

Brown, S. R. (1980). *Political Subjectivity. Applications of Q Methodology in Political Science*. New Haven and London: Yale University Press.

Brown, S. R. (1996). Q Methodology and Qualitative Research. *Qualitative Health Research*, *6*, 561–567.

Brown, S. R. (1997). The History and Principles of Q Methodology in Psychology and the Social Sciences. *Political Science*, 1–16.

Buuren, A. Van, Boons, F., & Teisman, G. (2012). Collaborative Problem Solving in a Complex Governance System: Amsterdam Airport Schiphol and the Challenge to Break Path Dependency. *Systems Research and Behavioral Science*, *29*, 116–130.

Castells, M. (1996). *The Rise of the Network Society: Volume I. The Information Age: Economy, Society and Culture*. Oxford: Blackwell Publishers.

Comrey, A. L. (1973). *A first course in factor analysis*. New York: Academic Press.

Conventz, S. (2010). New Office Space at International Hub Airports. In U. Knippenberger & A. Wall (Eds.), *Airports in Cities and Regions* (pp. 57–68). Karlsruhe: KIT Scientific Publishing.

Conventz, S., & Thierstein, A. (2011). The knowledge economy, hub airports and accesibility: A location based perspective - The case of Amsterdam-Schiphol. In *European Regional Science Association Conference*. Barcelona.

CROS. (n.d.). Doel en taken van de CROS. Retrieved October 25, 2013, from http://crosnet.nl/index.php?id=1030

CROS. (2013). *Jaarverslag 2012*.

Cuppen, E. (2012). A quasi-experimental evaluation of learning in a stakeholder dialogue on bio-energy. *Research Policy*, *41*, 624–637.

De Bruijn, J. A., & ten Heuvelhof, E. F. (2002). Policy analysis and decision making in a network: how to improve the quality of analysis and the impact on decision making. *Impact Assessment and Project Appraisal*, *20*, 232–242.

De Bruijn, J. A., & ten Heuvelhof, E. F. (2008). *Management in Networks. On Multi-Actor Decision Making*. London: Routledge.

De Jong, B. (2006). Schiphol Airport Amsterdam: to understand the past is to secure future economic growth Paper 46 th European Regional Science Association. *Paper 46th European Regional Science Association*, *30-03*, 1–21.

De Jong, B., Suau-Sanchez, P., & Droß, M. (2008). The Underestimated Airport Region: Reflecting on Planning Policies in the Airport Regions of Amsterdam, Barcelona and Munich. *Aerlines*, 1–5.

De Vries, M. S. (2008). Falling Between Two Cracks: The Indeterminate Character of Mid-level Government. *Public Organization Review*, *8*(1), 69–87.

Dickinson, R. E. (1947). *City Region and Regionalism: A Geographical Contribution to Human Ecology*. London: The Univeresity of North Carolina Press.

Dickinson, R. E. (2013). *City, Region and Regionalism*. Hoboken: Taylor and Francis.

Dierikx, M., & Bouwens, B. (1997). *Building Castles of the Air, Schiphol Amsterdam and the development of airport infrastructure in Europe, 1916-1996*. Den Haag: SDU Publishers.

Dobbs, R., Remes, J., Manyika, J., Roxburgh, C., Smit, S., & Schaer, F. (2012). *Urban world: Cities and the rise of the consuming class*. McKinsey Global Institute.

Du Plessis, T. (2005). *A Theoretical Framework of Corporate Online Communication. A Marketing Public Relations Perspective*. University of South Africa.

Duit, A., & Galaz, V. (2008). Governance and Complexity — Emerging Issues for Governance Theory. *Governance An International Journal Of Policy And Administration*, *21*(3), 311–335.

Dunn, W. N. (1981). *Public Policy Analysis: An Introduction*. Englewood Cliffs: Prentice-Hall.

Durning, D. (1999). The transition from traditional to postpositivist policy analysis: A role for Q-methodology. *Journal of Policy Analysis and Management*, *18*, 389–410.

El Makhloufi, A. (2012). *Spatial-economic metamorphosis of a nebula city; the case of the Amsterdam-Schiphol region during the 20 th century*.

El Makhloufi, A., & Kaal, H. (2011). From Airfield to Airport: An Institutionalist-Historical Approach to the Early Development of Amsterdam Airport Schiphol, 1916-1940. *Journal of Urban History*, *37*(4), 497–518.

Flindell, I. H., & Stallen, P. J. M. (1999). Non-acoustical factors in environmental noise. *Noise Health*, *1*, 11–16.

Forster, F. (2013). *The Alderstable: a strategic policy tool or democracy 2.0?*

Franssen, E. A. M., van Wiechen, C. M. A. G., Nagelkerke, N. J. D., & Lebret, E. (2004). Aircraft noise around a large international airport and its impact on general health and medication use. *Occupational and environmental medicine*, *61*, 405–413.

Freestone, R. (2009). Planning, Sustainability and Airport-Led Urban Development. *International Planning Studies*, *14*(2), 161–176.

Freestone, R., & Baker, D. (2011). Spatial Planning Models of Airport-Driven Urban Development. *Journal of Planning Literature*, *26*(3), 263–279.

Gordijn, H., Hornis, W., & Aykac, R. (2006). *Geluid rondom luchthavens*. Rotterdam: NAi Uitgevers.

Griggs, W., & Howarth, D. (2008). Populism, localism and environmental politics: the logic and rhetoric of the Stop Stansted Expansion campaign. *Planning Theory*, *7*, 123–144.

Güller, M. (2003). *From Airport to Airport City*. Barcelona: Gustavo Gili.

Hajer, M. A., van Tatenhove, J. P. M., & Laurent, C. (2004). *Nieuwe vormen van Governance* (pp. 1–37).

Hall, P. G. (2001). Global City-Regions in the Twenty-First Century. In A.J. Scott (Ed.), *Global City-Regions, Trends, Theory, Policy* (pp. 59–77). Oxford: OUP.

Hartwig, N. (2000). *Neue urbane Knoten am Stadtrand? Die Einbindung von Flughafen in der Zwischenstadt: Frankfurt/Main - Hannover - Leipzig/Halle - Munchen*. Berlin: Verlag fur Wissenschaft und Forschung.

Hermans, L. M., & Cunningham, S. W. (2013). Public Policy Analysis. In W. A. H. Thissen & W. E. Walker (Eds.), *Public Policy Analysis* (Vol. 179, pp. 185–213). Delft: Springer US.

Hesse, M. (2013). Cities and flows: re-asserting a relationship as fundamental as it is delicate. *Journal of Transport Geography*, *29*, 33–42.

Hooghe, L., & Marks, G. (2003). Unraveling the Central State, but How? Types of Multi-level Governance. *American Political Science Review*, *97*(02), 233–243.

Hoyler, M., Kloosterman, R. C., & Sokol, M. (2008). Polycentric Puzzles - Emerging Mega-City Regions Seen through the Lens of Advanced Producer Services. *Regional Studies*, *42*(8), 1055–1064.

I Amsterdam. (n.d.). About the Amsterdam Economic Board. Retrieved December 07, 2013, from http://www.iamsterdam.com/en-GB/business/About-the-Amsterdam-Economic-Board

Janssen-Jansen, L. (2011). From Amsterdam to Amsterdam Metropolitan Area: A Paradigm Shift. *International Planning Studies*, *16*(3), 257–272.

Janssen-Jansen, L., & Hutton, T. a. (2011). Rethinking the Metropolis: Reconfiguring the Governance Structures of the Twenty-first-century City-region. *International Planning Studies*, *16*(3), 201–215.

Janssen-Jansen, L., & Salet, W. (2009). The Amsterdam Office Space Tragedy. In J. W. Duyvendak, F. Hendriks, & M. van Niekerk (Eds.), *City in Sight, Dutch Dealings with Urban Change* (pp. 249–266). Amsterdam: Amsterdam University Press.

Jessop, B. (2009). From Governance to Governance Failure and from Multi-level Governance to Multi-scalar Meta-Governance. In B. Arts, A. Lagendijk, & H. van Houtum (Eds.), *The Disoriented State: Shifts in Governmentality, Territoriality and Governance* (Vol. 49, pp. 79–98). Dordrecht: Springer Science + Business Media.

Kerlinger, F. N. (1986). *Foundations of behavioural research. Holt Rinehart Winston London* (Vol. Hoit, Rine). Orlando, FL: Harcourt Brace & Company.

Kesselring, S. (2010). Global Transfer Points. In U. Knippenberger & A. Wall (Eds.), *Airports in Cities and Regions* (pp. 95–100). Karlsruhe: KIT Scientific Publishing.

Kitzinger, C. (1987). *The Social Construction of Lesbianism*. London: Sage Publications.

Klijn, E.-H., & Koppenjan, J. F. M. (2006). Institutional design. *Public Management Review*, *8*(1), 141–160.

Kooiman, J. (2003). *Governing as governance. Governance An International Journal Of Policy And Administration* (Vol. Primera). Lodon: Sage Publications.

Koppenjan, J., & Klijn, E.-H. (2004). *Managing uncertainties in networks: a network approach to problem solving and decision making. Erasmus* (p. 289). Routledge.

Kroesen, M., & Bröer, C. (2009). Policy discourse, people's internal frames, and declared aircraft noise annoyance: an application of Q-methodology. *Journal of the Acoustical Society of America*, *126*(1), 195–207.

Kroesen, M., Molin, E. J. E., & van Wee, B. (2011). Policy, personal dispositions and the evaluation of aircraft noise. *Journal of Environmental Psychology*.

Levelt, M., & Janssen-Jansen, L. (2013). The Amsterdam Metropolitan Area challenge: opportunities for inclusive coproduction in city-region governance. *Environment and Planning C: Government and Policy*, *31*(3), 540–555.

Lindblom, C. E. (1959). The Science of Muddling Through. *Public Administration Review*, *19*(2), 79–88.

Luthi, S., Thierstein, A., & Goebel, V. (2010). Intra-firm and extra-firm linkages in the knowledge economy: the case of the emerging mega-city region of Munich. *Global Networks*, *10*, 114–137.

Lynn, L. E., Heinrich, C. J., & Hill, C. J. (2002). *Improving Governance: A New Logic for Empirical Research. JOURNAL OF POLITICS* (Vol. 47, pp. 279–281). Georgetown University Press.

Mayntz, R. (2003). New Challenges to Governance Theory. In H. Bang (Ed.), *Governance as Social and Political Communication* (pp. 27–40). Manchester: Manchester University Press.

McKeown, M., Hinks, M., Stowell-Smith, M., Mercer, D., & Forster, J. (1999). Q methodology, risk training and quality management. *International Journal Of Health Care Quality Assurance Incorporating Leadership In Health Services*, *12*, 254–266.

Ministerie van IenM. (2012). *Structuurvisie Infrastructuur en Ruimte*. Den Haag.

Ministerie van VROM. (1988). *Vierde Nota over de Ruimtelijke Ordening*. Den Haag.

Ministerie van VROM. (2001). *Vijfde Nota over de Ruimtelijke Ordening*. Den Haag.

Ministerie van VROM. (2004). *Nota Ruimte; Ruimte voor Ontwikkeling*. Den Haag.

Moes, W., in t Veld, R., & Teisman, G. (2009). *Duurzame Ontwikkeling en Schiphol: Naar een Creatieve Confrontatie*. Den Haag.

Musterd, S., & Salet, W. (2003). *Amsterdam Human Capital. Amsterdam Human Capital*. Amsterdam: Amsterdam University Press.

Nuissl, H., & Heinrichs, D. (2011). Fresh Wind or Hot Air-Does the Governance Discourse Have Something to Offer to Spatial Planning? *Journal of Planning Education and Research*, *31*(1), 47–59.

Ostrom, E., & Andersson, K. P. (2008). Analyzing decentralized resource regimes from a polycentric perspective. *Policy Sciences*.

Ostrom, V., Tiebout, M., & Warren, R. (1961). The Organization of Government in Metropolitan Areas : A Theoretical Inquiry. *The American Political Science Review*, *55*(4), 831–842.

Pelikan, P., & Wegner, G. (2003). *The Evolutionary Analysis of Economic Policy* (p. 67). Cheltenham: Edward Elgar Publishing.

Peneda, M. J. A., Reis, V. D., & Macário, M. D. R. M. R. (2011). Critical Factors for Development of Airport Cities. *Transportation Research Record: Journal of the Transportation Research Board*, *2214*(-1), 1–9.

Pierre, J., & Peters, B. G. (2005). *Governing Complex Societies: Trajectories and Scenarios*. Hampshire: Palgrave Macmillan.

Provincie Noord-Holland. (n.d.). Regionale Samenwerking. Retrieved September 13, 2013, from http://www.noord-holland.nl/web/Actueel/Nieuws/Artikel/Regionale-samenwerking.htm

Raad V&W. (2008). *Helder kiezen, keuzes helder maken*. Den Haag: SDU Publishers.

Raad voor de leefomgeving en infrastructuur. (2013). *Sturen op Samenhang: Governance in de Metropolitane Regio Schiphol/Amsterdam*. Den Haag.

Rijksoverheid. (n.d.). OV SAAL.

Rijksoverheid. (2008). Kabinetsreactie op het advies van de Alderstafel over de toekomst van Schiphol en de regio voor de middellange termijn (tot en met 2020). Retrieved September 11, 2013, from http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/kamerstukken/2008/10/10/20081181-kabinetsreactie-op-het-advies-van-de-alderstafel-over-de-toekomst-van-schiphol-en-de-regio-voor-de-middellange-termijn-tot-en-met-2020/20081181.pdf

Rittel, H. W. J., & Webber, M. M. (1984). Planning Problems are Wicked Problems. In N. Cross (Ed.), *Developments in Design Methodology* (pp. 135–144). New York: John Wiley & Sons Inc.

SADC. (n.d.). Amsterdam Airport Area. Retrieved December 07, 2013, from http://www.sadc.nl/english/projects/amsterdam-airport-area-aaa

Salet, W., & Thornley, A. (2007). Institutional Influences on the Integration of Multilevel Governance and Spatial Policy in European City-Regions. *Journal of Planning Education and Research*, *27*(2), 188–198.

Schiphol Group. (2012). Annual Report 2012.

Schlaack, J. (2010). Defining the Airea. In U. Knippenberger & A. Wall (Eds.), *Airports in Cities and Regions* (pp. 113–126). Karlsruhe: KIT Scientific Publishing.

Schlinger, M. J. (1969). Cues on Q-Technique. *Journal of Advertising Research*, *9*, 53–60.

Schmolck, P. (2002). PQMethod (version 2.33). Retrieved April 10, 2013, from http://schmolck.userweb.mwn.de/qmethod/

Scott, Allen J. (2001). Globalization and the Rise of City-regions. *European Planning Studies*.

Stadsregio Amsterdam. (n.d.). De historie van Stadsregio Amsterdam. Retrieved October 08, 2013, from http://www.stadsregioamsterdam.nl/stadsregio-amsterdam-0/organisatie/historie/

Stainton Rogers, R. (1995). Q Methdology. In J. A. Smith, R. Harre, & L. van Langenhove (Eds.), *Rethinking Methods in Psychology* (pp. 178–192). London: Sage Publications.

Stevens, N., Baker, D., & Freestone, R. (2010). Airports in their urban settings: towards a conceptual model of interfaces in the Australian context. *Journal of Transport Geography*, *18*(2), 276–284.

Suau-Sanchez, P., Pallares-Barbera, M., & Paul, V. (2011). Incorporating annoyance in airport environmental policy: noise, societal response and community participation. *Journal of Transport Geography*, *19*(2), 275–284.

Teisman, G. (2001). Ruimte Mobiliseren voor Coopetitief Besturen. Oratie Erasmus Universiteit Rotterdam.

Teisman, G., & Klijn, E.-H. (2002). Partnership Arrangements: Governmental Rhetoric or Governance Scheme? *Public Administration Review*, *62*(2), 197–205.

Termeer, C. J. A. M., Dewulf, A., & Lieshout, M. Van. (2010). Disentangling Scale Approaches in Governance Research : Comparing Monocentric , Multilevel , and Adaptive Governance. *Ecology and Society*, *15*(4).

Van Boxtel, M., & Huys, M. G. (2005). Unraveling Decision Making about the Future Development of Amsterdam Airport Schiphol.

Van de Riet, O. (2003). *Policy Analysis in Multi-Actor Policy Settings, Navigating Between Negotiated Nonsens and Superfluous Knowledge*. Delft: Eburon.

Van den Dobbelsteen, A. (2013). *Better Airport Regions Stakeholder Conference - 17 May 2013*.

Van der Heiden, N., & Terhorst, P. (2007). Varieties of glocalisation: the international economic strategies of Amsterdam, Manchester, and Zurich compared. *Environment and Planning* C: *Government and Policy*, *25*(3), 341–356.

Van Eeten, M. (1999). *Dialogues of the Deaf: Defining New Agendas for Environmental Deadlocks*. Delft: Eburon.

Van Eeten, M. (2001). Recasting Intractable Policy Issues: The Wider Implications of the Netherlands Civil Aviation Controversy. *Journal of Policy Analysis and Management*, *20*(3), 391–414.

Van Exel, J., & de Graaf, G. (2005). Q methodology: A sneak preview. Retrieved from http://qmethod.org/articles/vanExel.pdf

Van Gent, W. (2009). Amsterdam Metropolitan Housing Policy: Sustainable Tenure Change? In *Paper prepared for Workshop 11 "Metropolitan housing policies: balancing betweenhousing and urban challenges" at the ENHR Conference*. Prague.

Van Leeuwen, B. (2009). Metropolitan strategies: diplomacy fuelled by stories. In *The 4th International Conference of the International Forum on Urbanism* (pp. 1173–1180).

Van Wijk, M. (2007). *Airports as Cityports in the City-region*. Utrecht: Faculty of Geosciences, Utrecht University.

Van Wijk, M., Atzema, O. A. L. C., & Jacobs, W. (n.d.). From inside-out to outside-in: Changing spatial-economic geography and planning in the Amsterdam-Schiphol region. In A. Thierstein & S. Conventz (Eds.), *Airports, Cities and Regions*. London: Routledge.

Vriesman, C. J., van Twist, M. J. W., & van de Riet, O. A. W. T. (2009). *Mainport 2.0*.

Warf, B., & Storper, M. (2000). The Regional World: Territorial Development in a Global Economy. *Economic Geography*, *76*, 101.

Watts, S., & Stenner, P. (2012). *Doing Q Methodological Research: Theory, Method and Interpretation. Sage Publication*. London: Sage Publications.

Weimer, D. L. (1999). Comment: Q-method and the isms. *Journal of Policy Analysis and Management*, *18*(3), 426–429.

Yua, K. N., Cheunga, Y. P., Cheunga, T., & Henryb, R. C. (2004). Identifying the impact of large urban airports on local air quality by nonparametric regression. *Atmospheric Environment*, *38*(27), 4501–4507.

Appendices

APPENDIX A: OVERVIEW OF PARTICIPANTS OF COLLABORATIVE BODIES

City Region of Amsterdam

Municipalities:

- [ ] Aalsmeer
- [ ] Amstelveen
- [ ] Amsterdam
- [ ] Beemster
- [ ] Diemen
- [ ] Edam-Volendam
- [ ] Haarlemmermeer
- [ ] Landsmeer
- [ ] Oostzaan
- [ ] Ouder-Amstel
- [ ] Purmerend
- [ ] Uithoorn
- [ ] Waterland
- [ ] Wormerland
- [ ] Zaanstad
- [ ] Zeevang

Amsterdam Metropolitan Area

Provinces:

- [ ] Noord-Holland
- [ ] Flevoland

Municipalities:

- [ ] Aalsmeer
- [ ] Almere
- [ ] Amstelveen
- [ ] Amsterdam
- [ ] Beemster
- [ ] Bennebroek
- [ ] Beverwijk
- [ ] Blaricum
- [ ] Bloemendaal
- [ ] Bussum
- [ ] Diemen
- [ ] Edam-Volendam
- [ ] Haarlem
- [ ] Haarlemmerliede en Spaarnwoude
- [ ] Haarlemmermeer
- [ ] Heemskerk
- [ ] Heemstede
- [ ] Hilversum
- [ ] Huizen
- [ ] Landsmeer
- [ ] Laren
- [ ] Lelystad
- [ ] Muiden
- [ ] Naarden
- [ ] Oostzaan
- [ ] Ouder-Amstel
- [ ] Purmerend
- [ ] Uitgeest
- [ ] Uithoorn
- [ ] Velsen
- [ ] Waterland
- [ ] Weesp
- [ ] Wijdemeren
- [ ] Wormerland
- [ ] Zaanstad
- [ ] Zandvoort
- [ ] Zeevang

Regional Authorities governing Schiphol (BRS)

Provinces:

- ☐ Noord-Holland
- ☐ Utrecht
- ☐ Zuid-Holland

Municipalities:

- ☐ Aalsmeer
- ☐ Alkmaar
- ☐ Alphen aan de Rijn
- ☐ Amstelveen
- ☐ Amsterdam
- ☐ Beemster
- ☐ Bergen
- ☐ Beverwijk
- ☐ Bloemendaal
- ☐ Castricum
- ☐ Diemen
- ☐ Edam-Volendam
- ☐ Graft-de Rijp
- ☐ Landsmeer
- ☐ Haarlem
- ☐ Haarlemmerliede en Spaarnwoude
- ☐ Haarlemmermeer
- ☐ Heemstede
- ☐ Heiloo
- ☐ Hillegom
- ☐ Kaag en Braassem
- ☐ Katwijk
- ☐ Leiden
- ☐ Lelystad
- ☐ Lisse
- ☐ Nieuwkoop
- ☐ Noordwijk
- ☐ Noordwijkerhout
- ☐ Oegstgeest
- ☐ Oostzaan
- ☐ Ouder-Amstel
- ☐ Purmerend
- ☐ Schermer
- ☐ Teylingen
- ☐ Uitgeest
- ☐ Uithoorn

- ☐ Utrecht
- ☐ Velsen
- ☐ Waterland
- ☐ Wormerland
- ☐ Zaanstad
- ☐ Zandvoort
- ☐ Zeevang

Schiphol Regional Consultative Committee (CROS)

Provinces:

- ☐ Noord-Holland
- ☐ Utrecht
- ☐ Zuid-Holland

Municipalities and resident representatives:

- ☐ Cluster Centre
  Haarlemmermeer
- ☐ Cluster East
  Amstelveen (Representative), Muiden, Ouder-Amstel, Weesp
- ☐ Cluster North-East
  Amsterdam
- ☐ Cluster North-Middle
  Oostzaan, Waterland, Wormerland, Zaanstad (Representative)
- ☐ Cluster North-West
  Haarlemmerliede en Spaarnwoude (Representative), Haarlem
- ☐ Cluster South
  Aalsmeer (Representative), Bodegraven-Reeuwijk, Kaag en Braassem, Nieuwkoop, Stichtse Vecht
- ☐ Cluster South-East
  Uithoorn (Representative), Hilversum
- ☐ Cluster South-West
  Leiden, Lisse, Noordwijkerhout (Representative)

Aviation Sector:

- ☐ KLM
- ☐ LVNL
- ☐ Martinair
- ☐ Schiphol Group
- ☐ Transavia

Alders Table

Ministry of Infrastructure and Environment

BRS Delegation:

Provinces

☐ Noord-Holland
☐ Zuid-Holland

Municipalities

☐ Amstelveen
☐ Amsterdam
☐ Castricum
☐ Haarlemmermeer

Aviation Sector:

☐ Board of Airline Representatives In the Netherlands (BARIN)
☐ KLM
☐ LVNL
☐ Schiphol Group

Residents:

☐ CROS resident representatives
☐ VGP resident representatives

Governmental Forum Schiphol (BFS)

☐ Municipality of Amsterdam
☐ Municipality of Haarlemmermeer
☐ Province of Noord-Holland
☐ Schiphol Group

Amsterdam Airport Area

Province of Noord-Holland

Municipalities:

- ☐ Almere
- ☐ Amstelveen
- ☐ Amsterdam
- ☐ Haarlemmermeer
- ☐ Lelystad
- ☐ Zaanstad

Business Locations:

- ☐ Forward Business Parks
- ☐ Green Park Aalsmeer
- ☐ SADC
- ☐ Schiphol Real Estate
- ☐ OMALA
- ☐ Port of Amsterdam

Developers and Real Estate Specialists:

- ☐ AM Real Estate Development
- ☐ Delta Development Group
- ☐ Dura-Vermeer
- ☐ MAB Development
- ☐ Prologis
- ☐ SEGRO

Banks and Finance Specialists:

- ☐ ABN-AMRO
- ☐ Rabobank
- ☐ Briddge

Local company representatives:

- ☐ IJS Global
- ☐ Chamber of Commerce (Kamer van Koophandel – KVK)

Amsterdam Economic Board

Provinces:

☐ Noord-Holland
☐ Flevoland

Municipalities:

☐ Almere
☐ Amstelveen
☐ Amsterdam
    o Dienst Basisinformatie
    o Dienst Infrastructuur, Verkeer en Vervoer
    o Dienst Onderzoek en Statistiek
    o Dienst Ruimtelijke Ordening gemeente Amsterdam
    o Economische Zaken, Gemeente Amsterdam
☐ Diemen
☐ Haarlem
☐ Haarlemmermeer
☐ Hilversum
☐ Ouder-Amstel
☐ Purmerend
☐ Zaanstad

Schiphol Group

Other public and private participants:

☐ 4 Work B.V.
☐ Abbott Healthcare Products B.V.
☐ ABN AMRO BANK N.V.
☐ Academie van de Stad
☐ Academisch Medisch Centrum
☐ Accenture B.V.
☐ AdamNet
☐ Afval Energie Bedrijf gemeente Amsterdam
☐ Akzo Nobel N.V.
☐ Alliander N.V.
☐ AM Wonen
☐ Amsterdam Center for Entrepreneurship (ACE)
☐ Amsterdam Internet Exchange (AMS-IX)
☐ Amsterdam RAI
☐ Amsterdam School of Real Estate
☐ Amsterdamse Hogeschool voor de Kunsten
☐ Amsterdamse Innovatie Motor

☐ Arcadis Nederland B.V.
☐ Arkin
☐ Baker & McKenzie Amsterdam N.V.
☐ Ballast Nedam
☐ Bank Insinger de Beaufort N.V.
☐ Boekel De Nerée
☐ Boomers Top Generation B.V.
☐ Bureau Jeugdzorg Agglomeratie Amsterdam
☐ Capgemini
☐ CBE Academica
☐ Centrum Wiskunde & Informatica
☐ CGI
☐ Cisco Systems
☐ Club van 30 B.V.
☐ Colt Technology Services B.V.
☐ Corporate Recovery Management B.V.
☐ Creyf's Beheer
☐ De Gezonde Stad
☐ De Man & Partners B.V.

- ☐ DEA B.V.
- ☐ Decisio B.V.
- ☐ Deloitte
- ☐ Deutsche Bank Nederland
- ☐ Energieonderzoek Centrum Nederland (ECN
- ☐ Ernst & Young Accountants LLP
- ☐ Evalueserve
- ☐ F. van Lanschot Bankiers
- ☐ Faculteit der Maatschappij- en Gedragswetenschappen Universiteit van Amsterdam
- ☐ FOM Instituut voor Atoom- en Molecuulfysica (AMOLF)
- ☐ Generali Verzekeringsgroep N.V.
- ☐ GGD Amsterdam
- ☐ Goudappel Coffeng B.V.
- ☐ Greenport Aalsmeer
- ☐ Haven Amsterdam
- ☐ Het Nederlandse Rode Kruis
- ☐ Hogeschool Inholland Amsterdam/Diemen
- ☐ Hogeschool Inholland Haarlem
- ☐ Hogeschool van Amsterdam
- ☐ HvA, Domein Media, Creatie en Informatie
- ☐ IBM Nederland B.V.
- ☐ Info.nl
- ☐ ING Bank
- ☐ ING Groep
- ☐ Ingenieursbureau Amsterdam
- ☐ Ingenieursbureau Post en Dekker
- ☐ Instituut voor Bedrijfs- en Industriële Statistiek van de Universiteit van Amsterdam
- ☐ International Bureau of Fiscal Documentation (IBFD)
- ☐ IVAM research and consultancy on sustainability
- ☐ Jan Benjamens Kennisadvies
- ☐ JCDecaux
- ☐ Kamer van Koophandel Amsterdam
- ☐ Kohnstamm Instituut
- ☐ Koninklijk Instituut voor de Tropen (KIT)
- ☐ Koninklijke Joh. Enschedé
- ☐ Koninklijke Luchtvaart Maatschappij N.V.
- ☐ Koninklijke Nederlandse Akademie van Wetenschappen

- ☐ KplusV Organisatieadvies B.V.
- ☐ KPMG
- ☐ KPN
- ☐ Lagerweij & Partners Consultants B.V.
- ☐ Loyens & Loeff
- ☐ Lubbers en Dijk notarissen
- ☐ Lux Research Inc.
- ☐ Maes en Lunau Executive Search
- ☐ MAS Dienstverleners
- ☐ MATRIX Innovation Center
- ☐ Maxwell Group
- ☐ Mercuri Urval
- ☐ Microsoft B.V.
- ☐ Minds Unlimited
- ☐ Mojo Concerts
- ☐ Nationaal instituut voor subatomaire fysica
- ☐ Nationaal Lucht en Ruimtevaartlaboratorium
- ☐ Nederlands Kanker Instituut/Antoni van Leeuwenhoek-ziekenhuis
- ☐ NEMO
- ☐ Neuroscience Campus Amsterdam
- ☐ New Energie Docks
- ☐ NMC-Nijsse International Executive Search
- ☐ NV NUON
- ☐ NYSE Euronext
- ☐ Ondernemersvereniging Amstelveen
- ☐ Ondernemersvereniging Regio Amsterdam
- ☐ Onderwijs Centrum Binnenvaart
- ☐ Ontwikkelingsmaatschappij Flevoland
- ☐ Openbare Bibliotheek Amsterdam
- ☐ PBF Innovatie BV
- ☐ Platform Arbeidsmarkt en Onderwijs
- ☐ PwC N.V.
- ☐ Rabobank Amsterdam
- ☐ Randstad Nederland
- ☐ Regionaal Opleidings Centrum NOVA College
- ☐ ROC Nova College
- ☐ ROC van Amsterdam
- ☐ Rode Kruis Ziekenhuis
- ☐ Schenk Makelaars B.V.
- ☐ Schouten en Nelissen
- ☐ Science Park Amsterdam
- ☐ Shell Technology Centre Amsterdam
- ☐ Sportplanbureau

- ☐ Sportraad Amsterdam
- ☐ Stadsarchief Amsterdam
- ☐ Start-Up Network Amsterdam (SUN)
- ☐ Stichting Beheer NDSM-werf Oost
- ☐ Stichting Sanquin Bloedvoorziening
- ☐ Stichting voor Fundamenteel Onderzoek der Materie
- ☐ SURFsara Amsterdam
- ☐ Syntens
- ☐ TATA Consultancy Services B.V.
- ☐ TNO Kwaliteit van Leven
- ☐ TPEX TelePresence Exchange International
- ☐ Trinité Automation
- ☐ Twynstra Gudde Adviseurs en Managers
- ☐ Universiteit van Amsterdam
- ☐ UPC Nederland
- ☐ UWV-Werkbedrijf
- ☐ Van der Hoeden Mulder Gerechtsdeurwaarders
- ☐ Van Ede & Partners
- ☐ Vereniging Samenwerkende Instellingen Gezondheidszorg Regio Amsterdam
- ☐ Vereniging van bedrijven in Amsterdam-Noord
- ☐ Vialis bv
- ☐ Vitae
- ☐ Vodafone Netherlands
- ☐ Vrije Universiteit
- ☐ VU Medisch Centrum
- ☐ Waternet
- ☐ Wetenschap & Technologie Centrum Watergraafsmeer
- ☐ Ymere
- ☐ ZAAM
- ☐ Ziut B.V.
- ☐ Zuidas Amsterdam

APPENDIX B: VISION ON DEVELOPMENT OF SCHIPHOL REGION 2009-2030 BY THE BFS
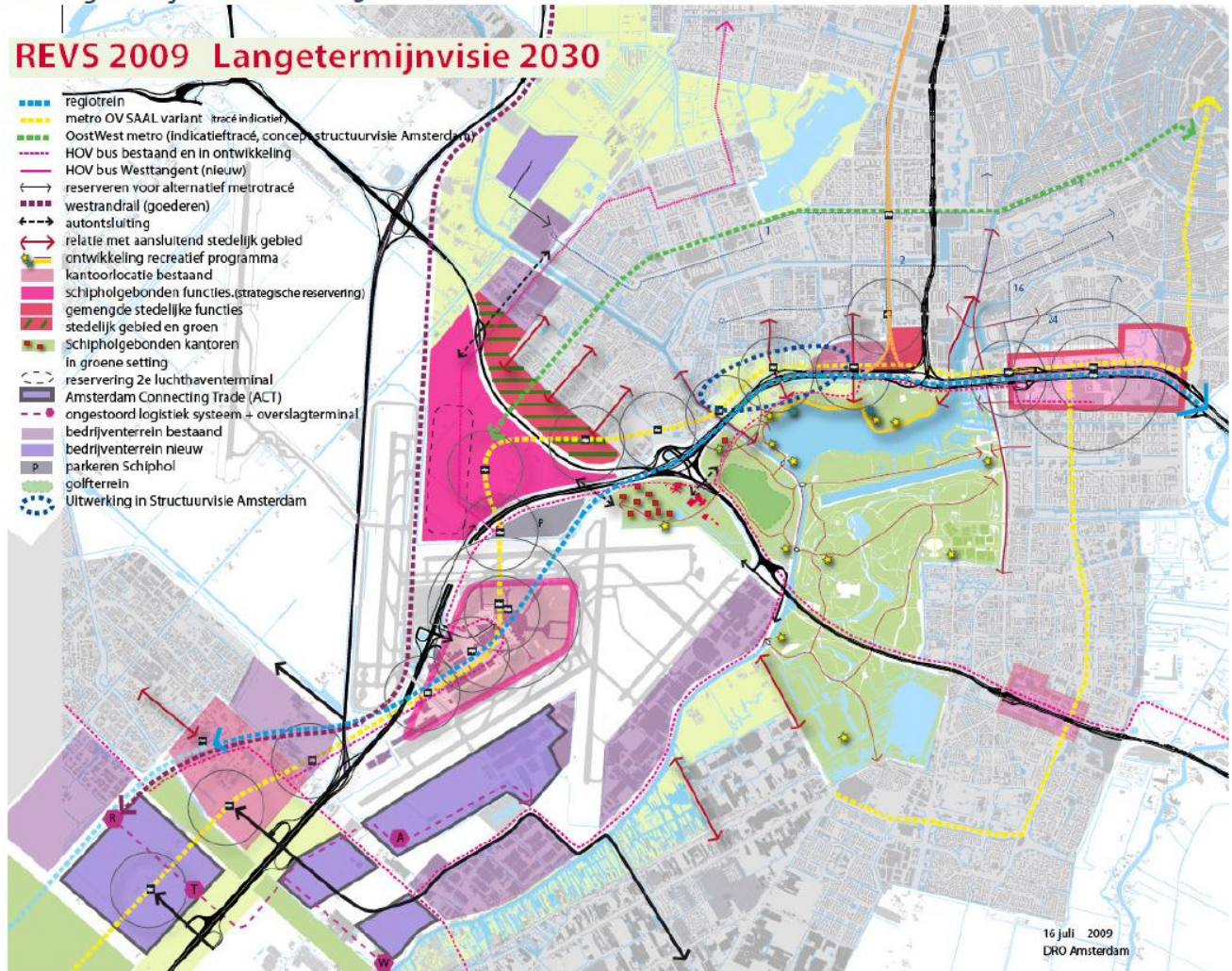
FIGURE 14: REVS LONG-TERM VISION SCHIPHOL 2009-2030 (BFS, 2009)

APPENDIX C: OVERVIEW OF MUNICIPALITY, PROVINCE AND NATIONAL PARTICIPATION IN COLLABORATIVE BODIES

TABLE 18: MUNICIPALITIES IN COLLABORATIVE BODIES

	BFS	BRS	CROS	Alders	AMA	SRA	AAA	AEB	Total Participations
Municipality of Amsterdam	1	1	1	1	1	1	1	1	8
Municipality of Haarlemmermeer	1	1	1	1	1	1	1	1	8
Municipality of Amstelveen		1	1	1	1	1			5
Municipality of Aalsmeer		1	1		1	1			4
Municipality of Oostzaan		1	1		1	1			4
Municipality of Ouder-Amstel		1	1		1	1			4
Municipality of Uithoorn		1	1		1	1			4
Municipality of Waterland		1	1		1	1			4
Municipality of Wormerland		1	1		1	1			4
Municipality of Zaanstad		1	1		1	1			4
Municipality of Almere					1		1	1	3
Municipality of Beemster		1			1	1			3
Municipality of Diemen		1			1	1			3
Municipality of Edam-Volendam		1			1	1			3
Municipality of Landsmeer		1			1	1			3
Municipality of Purmerend		1			1	1			3
Municipality of Zeevang		1			1	1			3
Municipality of Haarlem		1	1		1				3
Municipality of Haarlemmerliede en Spaarnwoude		1	1		1				3
Municipality of Lelystad		1			1		1		3
Municipality of Castricum		1		1					2
Municipality of Hillegom		1	1						2
Municipality of Kaag en Braassem		1	1						2
Municipality of Leiden		1	1						2
Municipality of Lisse		1	1						2
Municipality of Nieuwkoop		1	1						2
Municipality of Noordwijk		1	1						2
Municipality of Noordwijkerhout		1	1						2
Municipality of Oegstgeest		1	1						2
Municipality of Teylingen		1	1						2
Municipality of Utrecht		1	1						2
Municipality of Beverwijk		1			1				2
Municipality of Bloemendaal		1			1				2
Municipality of Heemstede		1			1				2
Municipality of Muiden			1		1				2
Municipality of Uitgeest		1			1				2
Municipality of Velsen		1			1				2
Municipality of Zandvoort		1			1				2
Municipality of Weesp			1		1				2
Municipality of Bennebroek					1				1
Municipality of Blaricum					1				1

Municipality of Bussum				1				1
Municipality of Heemskerk				1				1
Municipality of Hilversum				1				1
Municipality of Huizen				1				1
Municipality of Laren				1				1
Municipality of Naarden				1				1
Municipality of Wijdemeren				1				1
Municipality of Alkmaar		1						1
Municipality of Alphen aan den Rijn		1						1
Municipality of Bergen		1						1
Municipality of Graft- de Rijp		1						1
Municipality of Heiloo		1						1
Municipality of Katwijk		1						1
Municipality of Schermer		1						1
Municipality of Bodegraven-Reeuwijk			1					1
Municipality of Stichtse Vecht			1					1

TABLE 19: PROVINCES AND NATIONAL GOVERNMENT IN COLLABORATIVE BODIES

	BFS	BRS	CROS	Alders	AMA	SRA	AAA	AEB	Total Participations
Province of Noord-Holland	1	1	1	1	1		1	1	7
Province of Zuid-Holland		1	1	1					3
Province of Utrecht		1	1						2
Province of Flevoland					1				1
Ministry of I&E				1					1

APPENDIX D: RESPONDENT OVERVIEW

TABLE 20: OVERVIEW OF STAKEHOLDER INTERVIEWS AND Q-SORT RESPONDENTS

	Organisation	Interviews	Q-Sort
Public Actors	Muncipality of Amsterdam	Interview B	X
		x	Respondent 15
		x	Respondent 16
		x	Respondent 28
		x	Respondent 39
	Municipality of Haarlemmermeer	Interview A	Respondent 32
		Interview G	X
		Interview M	Respondent 1
		x	Respondent 3
	Municipality of Aalsmeer	x	Respondent 11
	Municipality of Amstelveen	x	Respondent 30
	Municipality of Haarlem	x	Respondent 21
	Municipality of Lelystad	x	Respondent 37
	Province of Noord-Holland	Interview I	Respondent 7
		x	Respondent 6
	Ministry of Infrastructure & Environment	Interview F	Respondent 13
		x	Respondent 12
	Ministry of Economic Affairs	x	Respondent 40
	City Region of Amsterdam	x	Respondent 38
	Water Board of Rijnland	x	Respondent 41
Public Companies	Schiphol	Interview C	Respondent 31
		x	Respondent 29
	SADC	Interview O	X
		x	Respondent 8
	Port of Amsterdam	x	Respondent 27
	Greenpark Aalsmeer	x	Respondent 19
Public/Private Collaborations	Greenport Aalsmeer	x	Respondent 17
	Amsterdam Economic Board	x	Respondent 33
	SMASH	Interview H	Respondent 14
Private Companies	KLM	Interview L	Respondent 34
	Colliers International	x	Respondent 25
	Delta Project Development	x	Respondent 26
	Rabobank	x	Respondent 36
Interest Parties	Schiphol Quality of Life Foundation (Stichting Leefomgeving Schiphol)	Interview D	Respondent 2
	Society for Nature and Environment (Natuur & Milieu)	x	Respondent 35

	Confederation of Netherlands Industry and Employers (VNO NCW)	x	Respondent 5
	Air Traffic Control Netherlands (LVNL)	x	Respondent 9
	Farmer Representative	Interview N	Respondent 18
	Inhabitant Representative	Interview R	Respondent 23
Experts/Researchers on the Schiphol airport region and/or governance issues	Several	Interview E	Respondent 10
		Interview J	X
		Interview K	X
		Interview P	X
		Interview Q	X
		x	Respondent 4
		x	Respondent 20
		x	Respondent 22
		x	Respondent 24

APPENDIX E: DEFINITION OF STATEMENTS FOR THE Q-SAMPLE

This appendix describes how the selection of 65 statements took place from the original starting point of 100 statements.

In order to arrive at 65 statements firstly the overlapping statements were removed or reformulated. After this, several Q-methodology and Schiphol experts were consulted in order to further reduce the initial amount of statements. The draft statements that were left after this, were used in test rounds on several volunteers in order to test whether the formulation was clear.

Not only is it important that the statements do not contain too much insiders' terminology, but also that the statements are not too double-barrelled, so that they cannot be interpreted in completely different ways. A good example of a multi-interpretable statement is given by Watts and Stenner (2012, p. 62): "*I play truant regularly because I find school boring*". When a participant disagrees with this statement to a certain extent, this could mean: (1) the participant never skips school, (2) the participant plays truant occasionally or rarely, because school is boring; or (3) the participant plays truant regularly, but for several other reasons. As a researcher it can be tempting to phrase very long statements to gather as much as information as possible. However, as shown by the previous example, this is counter-productive, as the ambiguity of the interpretation is similar to no information at all.

Another thing that was tested in the test rounds was whether the Q-sample was balanced in terms of positive and negative statements. From a practical point of view this is useful, to avoid statements piling up on the positive or negative side of the Q-sort diagram when a respondent holds an extremely positive or negative view on the topic (Du Plessis, 2005).

After the test rounds some statements were reformulated because they were said to be unclear, some statements that were thought to be of less added value were removed and some suggestions of the test persons were added. The final set of 65 statements can be found in Table 21. A Part of the statements is purely about how decision-making should be organised in the Schiphol region and is therefore marked as a "Governance"-statement. Another part of the statements relates more to substantive interface themes between Schiphol and its environment (e.g. economic development, land use, noise, sustainability) and is thus marked as a "Substantive"-statement.

TABLE 21: ENGLISH TRANSLATION OF THE 65 STATEMENTS IN THE Q-SAMPLE

	Governance	Substantive
1. A well-connected airport is the most important factor for our metropolitan economy.		x
2. The importance of Schiphol's international network is overestimated.		x
3. We should only add new Schiphol destinations if this attracts new companies.		x
4. If KLM loses its hub status at Schiphol, the regional economy will suffer severely.		x
5. Schiphol as 'Gateway to Europe' is less important for the AMA than 10 years ago.		x
6. For the development of the region governments need to invest in infrastructure and area development.		x
7. Governments mainly need to invest in the improvement of collaboration between companies in the 7 clusters defined by the		x

Amsterdam Economic Board.		
8. State officials do not have enough knowledge.	x	
9. The Province lost its control on the Schiphol file.	x	
10. Amsterdam should take the lead in Schiphol-related issues.	x	
11. It is important that citizens express themselves in a referendum before any expansion of Schiphol.	x	
12. Regional decisions (BFS, Plabeka, AMA) are characterised by a democratic deficit.	x	
13. All parties are represented by the municipality and do not need their own representatives in the Schiphol governance bodies.	x	
14. The BRS can be abolished after the establishment of the Environmental Council.	x	
15. Eventually the local administrators in the BRS should decide on the growth of Schiphol.	x	
16. Local administrators and interest groups should decide jointly on the growth of Schiphol.	x	
17. At the Alders Table no comprehensive considerations are made: they only talk about noise.	x	
18. Plabeka was mainly used by interested parties to keep their own projects alive.	x	
19. Thanks to Plabeka some balance is created on the commercial real estate market.	x	
20. Vacancy and overcapacity on the real estate market is mainly a problem for the market parties.	x	
21. Plabeka shows that the region will only collaborate when there are big problems.	x	
22. Policy decisions do not show enough distinction between the public spatial planning task and the land ownership: our own locations first!	x	
23. The BFS should be revived as soon as possible.	x	
24. Governments in the Schiphol airport region act as profit-oriented enterprises.	x	
25. Municipalities like Amstelveen, Aalsmeer and Haarlem should be included in the BFS.	x	
26. Selective settlement policy (Schiphol binding, Port binding, Flowers binding) is outdated and should be abolished.		x
27. The national Government should interfere with Schiphol policy as little as possible.	x	
28. The national Government is delegating more and more Schiphol files.	x	
29. The most important decisions about Schiphol and the region are made through short lines with the Ministry of I&E.	x	
30. After the proposed fusion of Provinces, the new Province will be able to offer more counterweight to Amsterdam and Schiphol.	x	
31. If municipalities would get the freedom, they would completely fill the Schiphol Area up with buildings.	x	

32. Relevant aviation decisions are not made in the Netherlands anymore, but in Paris, Brussels and Dubai.		x
33. KLM creates employment here, other airlines barely do.		x
34. In the future KLM will not be a dominant party at Schiphol anymore.		x
35. If the BFS is abolished, Schiphol should become a formal party in AMA governance bodies.	x	
36. Schiphol should be more concerned with its direct environment, such as spatial, water, energy and waste issues.		x
37. SADC should primarily concentrate on industrial areas in the Schiphol area.	x	
38. The shareholders of SADC give sufficient direction.	x	
39. SADC should expand to become a development company of the AMA.	x	
40. The Environmental Council should also include a nature party.	x	
41. The Environmental Council should also include a farmers' party.	x	
42. The AMA should get one transparent metropolitan board.	x	
43. The informal consultations in the AMA will split if it gets too exciting.	x	
44. To get some speaking time with the mayor, it is best for a company or knowledge institute to participate in the Amsterdam Economic Board.	x	
45. Companies and knowledge institutes should co-decide on the investments of the Amsterdam Economic Board.	x	
46. The spatial models by SMASH do not go far enough for me.		x
47. Eventually the AMA should have one regional development company.	x	
48. I think that it is better if Schiphol does not develop any real estate outside the Schiphol territory (outside the fence).		x
49. Only by using local noise limits local governments can influence the flight behaviour at Schiphol.		x
50. In the future noise measurements should be performed by an independent institute.		x
51. For our organisation it is for the best that the partial privatisation of Schiphol did not take place.	x	
52. In 2020 there will be a AMA public transport authority.	x	
53. A regional public transport authority is the base for a competing metropolitan region.	x	
54. Farmers should get paid to maintain the landscape around Schiphol, instead of having to pay for land lease.		x
55. Farmers should get a prominent role again in the development of Schiphol, just like "*Schiphol farmers*" in the past.		x
56. No new residential areas should be constructed within the noise contours.		x
57. It is up to the market whether there is a need for dwellings within the noise contours.		x
58. Future housing in the AMA should be rather built by densification than by building closer to Schiphol.		x

59. Schiphol should develop further as AirportCity.		x
60. The Amsterdam region should develop itself along the airport corridor.		x
61. Local farmers should play a role in the processing of Schiphol's bio waste.		x
62. I don't care whether the meals of airlines come from this region or not.		x
63. If Schiphol really wants to emit less CO_2, they should refuse more polluting aircrafts.		x
64. At the moment Schiphol is sustainable enough.		x
65. Public companies (Schiphol, SADC, Port) should be treated by governments as market parties.	x	
Total	38	27

APPENDIX F: Q-SORT PROCEDURE

The following procedure was followed to collect the Q-sort data:

The Q-sorts were carried out in live meetings with each respondent. Even though this is a time-consuming matter compared to computer-based sorting it allows for the collection of more qualitative information as the researcher can ask questions about certain decisions made and can offer some explanation if anything is unclear.

When sorting the 65 statements from this study on the Q-sort board, the respondent had to make $(1/2)(65)(65\text{-}1) = 2080$ judgments, which is exactly what makes Q-methodology such an interesting method. However, the amount of judgments to be made can be a bit overwhelming for respondents. Therefore, the participants were asked to read through all statements first and make an initial division of three provisional categories: A category of (1) statements about which they felt positive, a category of (2) statements about which they felt negative and a category of (3) statements about which they were unsure, indifferent or that induced mixed feelings. From here on, the participants were better able to carry out finer-grained value judgments for every of the three piles, until the distribution was filled. An important notion that was pointed out to the respondents was the relativity of the ranking values. Even when a participant agrees with all statements, a ranking is still possible (Barry & Proops, 1999). So if a statement ends up with a negative ranking, this does not necessarily have to indicate disagreement. The only thing that this means is that the respondent agrees with this statement slightly less than the ones ranked immediately above it and slightly more than the ones ranked below it. Whenever one of the participants was in doubt for a long time about whether to put a particular statement on for example -4 or -5, they were gently told not to get hung on the exact ranking of specific statements. After all, the Q-methodology is all about finding out a general sense of their likes and dislikes and whether a specific statement ends up at -4 or -5 will therefore not make a big difference. Otherwise, participants were given freedom to play around with the statements without interference. However, they were asked to speak and motivate their decisions along the way. This information was written down by the observers. Moreover, by observing the participants as they were sorting the statements, it was possible to note where their positive items ended and where their negativity began. All this extra information allowed for more qualitative input towards a better factor interpretation.

Most Agreement										Least Agreement
+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5

FIGURE 15: DISTRIBUTION (+5 TO -5) USED FOR Q-SORTS

APPENDIX G: Q-SORT CORRELATION MATRIX

TABLE 22: CORRELATION MATRIX OF THE 41 Q-SORTS (PART 1)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1																				
2	0,28																			
3	0,45	0,15																		
4	-0,02	0,26	0,07																	
5	0,11	0,40	-0,01	0,21																
6	0,42	0,15	0,34	-0,08	0,04															
7	0,25	0,31	0,35	0,38	0,22	0,11														
8	0,40	0,46	0,36	0,12	0,38	0,29	0,23													
9	0,48	0,29	0,35	0,22	0,26	0,45	0,35	0,26												
10	0,41	0,40	0,28	0,20	0,51	0,29	0,37	0,47	0,41											
11	0,23	0,10	-0,06	0,02	-0,05	0,25	-0,10	-0,03	0,21	0,08										
12	0,15	0,04	0,16	0,03	0,03	0,03	0,06	0,19	0,19	0,08	0,08									
13	0,21	0,11	0,09	0,09	0,09	0,15	0,12	0,27	0,03	0,15	-0,01	0,17								
14	0,23	0,31	0,06	0,00	0,21	0,23	0,10	0,22	0,07	0,11	0,28	0,05	0,16							
15	0,25	0,02	0,24	0,13	0,20	0,38	0,11	0,24	0,21	0,28	-0,01	-0,10	-0,07	-0,10						
16	0,33	0,30	0,27	0,17	0,47	0,21	0,19	0,53	0,28	0,64	-0,03	0,14	0,13	0,07	0,36					
17	0,27	0,22	0,08	0,21	0,29	0,20	0,22	0,21	0,26	0,25	0,01	0,05	0,19	0,25	0,08	0,13				
18	0,06	0,16	-0,14	0,06	0,16	-0,10	-0,05	0,19	-0,22	-0,06	0,03	-0,15	0,29	0,25	-0,07	0,16	0,03			
19	0,16	0,34	0,21	0,27	0,35	0,23	0,28	0,24	0,28	0,36	0,10	0,25	0,07	0,52	0,02	0,11	0,42	-0,05		
20	0,27	0,44	0,28	0,05	0,24	0,15	0,30	0,28	0,28	0,36	0,08	0,16	-0,09	0,23	0,09	0,33	0,14	0,12	0,26	
21	0,13	0,42	0,23	0,24	0,24	-0,04	0,13	0,36	0,02	0,27	0,12	0,00	0,09	0,30	0,03	0,29	0,15	0,24	0,28	0,28
22	0,05	0,30	0,22	0,06	0,00	0,03	0,08	0,19	-0,04	0,09	0,02	0,03	0,10	0,14	0,08	0,19	0,15	0,21	0,05	0,24
23	0,07	0,45	0,13	0,22	0,44	0,12	0,22	0,26	0,37	0,35	0,07	0,11	-0,20	0,17	0,16	0,30	0,19	-0,08	0,28	0,30
24	0,01	0,34	0,16	0,29	0,11	-0,10	0,29	0,07	0,05	0,18	0,15	0,13	0,15	0,33	-0,30	0,03	0,15	0,11	0,38	0,16
25	0,29	0,31	0,11	0,02	0,30	0,00	0,23	0,34	0,25	0,25	-0,03	-0,16	0,09	0,22	0,13	0,25	0,13	0,25	0,15	0,20
26	0,20	0,56	0,02	0,06	0,32	0,14	0,11	0,28	0,15	0,29	0,19	0,16	0,09	0,32	0,13	0,06	0,30	0,13	0,40	0,42
27	0,45	0,32	0,24	0,22	0,22	0,28	0,27	0,09	0,49	0,41	-0,04	0,11	-0,02	0,29	0,20	0,16	0,42	-0,22	0,33	0,30
28	0,16	0,33	0,11	-0,09	0,30	0,15	0,03	0,37	0,06	0,28	0,04	0,10	0,11	0,17	0,28	0,39	0,01	0,17	0,06	0,35
29	0,37	0,32	0,26	0,24	0,48	0,28	0,38	0,38	0,51	0,54	0,05	0,09	0,10	0,13	0,36	0,47	0,45	0,03	0,31	0,43
30	0,18	0,23	0,18	0,02	0,17	0,30	0,15	0,30	0,24	0,24	0,23	0,15	0,05	0,24	0,22	0,34	0,18	-0,06	0,26	0,16
31	0,43	0,31	0,39	0,27	0,45	0,33	0,28	0,46	0,52	0,63	0,04	0,13	0,26	0,05	0,18	0,48	0,32	-0,10	0,33	0,30
32	0,45	0,14	0,32	0,30	0,13	0,16	0,33	0,42	0,24	0,49	0,16	0,14	0,25	0,16	0,21	0,53	0,01	0,07	0,16	0,15
33	0,38	0,19	0,42	-0,04	0,09	0,31	0,10	0,36	0,43	0,38	0,14	0,10	0,24	0,31	0,11	0,33	0,17	0,08	0,25	0,35
34	0,09	0,25	0,00	0,52	0,43	0,12	0,23	0,21	0,47	0,21	-0,05	0,05	0,09	0,15	0,13	0,24	0,37	0,16	0,22	0,00

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
35	-0,10	0,28	-0,10	0,18	0,21	0,11	0,21	0,01	0,02	0,19	0,23	-0,23	-0,05	0,17	-0,01	0,01	-0,05	0,12	0,16	0,10
36	0,29	0,30	0,21	0,13	0,25	0,28	0,13	0,41	0,36	0,40	0,07	-0,02	0,29	0,23	-0,02	0,34	0,27	0,11	0,18	0,08
37	0,33	0,29	0,30	0,38	0,34	0,13	0,33	0,36	0,40	0,50	0,01	0,28	0,07	0,21	0,22	0,41	0,16	-0,08	0,39	0,39
38	0,13	0,25	0,25	-0,15	-0,01	0,00	0,30	0,24	0,01	-0,25	0,15	-0,10	0,07	0,21	0,05	0,18	0,11	-0,13	0,33	0,08
39	0,17	0,16	0,17	0,17	-0,03	0,03	0,11	0,08	0,01	-0,02	0,28	0,03	0,05	0,35	0,13	0,08	0,10	0,05	0,18	0,11
40	0,32	0,18	0,29	0,42	0,20	0,15	0,41	0,28	0,27	0,26	0,01	0,20	0,21	0,20	0,11	0,34	0,32	0,11	0,28	0,08
41	0,40	0,40	0,22	0,23	0,35	0,27	0,28	0,34	0,44	0,48	0,11	0,00	0,28	0,33	0,23	0,27	0,45	0,19	0,45	0,27

TABLE 23: CORRELATION MATRIX OF THE 41 Q-SORTS (PART 2)

	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
22	0,43																				
23	0,27	0,10																			
24	0,15	0,13	0,16																		
25	0,21	0,08	0,09	0,12																	
26	0,29	0,25	0,35	0,28	0,20																
27	0,20	0,13	0,40	0,07	0,15	0,38															
28	0,28	0,26	0,09	0,08	0,35	0,44	0,08														
29	0,30	0,15	0,35	0,06	0,43	0,36	0,45	0,30													
30	-0,13	0,05	0,20	0,18	0,05	0,08	0,08	0,16	0,24												
31	0,14	-0,10	0,25	0,13	0,32	0,27	0,38	0,18	0,54	0,20											
32	0,23	0,15	-0,03	0,07	0,15	-0,04	0,12	0,16	0,31	0,25	0,37										
33	0,31	0,02	0,14	0,03	0,31	0,23	0,30	0,28	0,36	0,41	0,42	0,28									
34	0,11	0,00	0,43	0,12	0,08	0,13	0,36	-0,07	0,35	0,15	0,27	0,05	0,10								
35	0,45	0,05	0,29	0,19	0,01	0,15	0,05	-0,08	0,10	-0,05	0,03	0,03	0,01	0,13							
36	0,29	0,11	0,15	0,09	0,24	0,16	0,19	0,07	0,37	0,32	0,34	0,29	0,52	0,25	0,19						
37	0,41	0,08	0,32	0,19	0,20	0,25	0,55	0,07	0,56	0,10	0,44	0,39	0,32	0,38	0,25	0,30					
38	0,17	0,09	0,00	0,35	0,14	0,07	0,29	0,13	0,11	0,24	0,12	0,18	0,19	-0,02	0,01	0,06	0,35				
39	0,26	0,32	0,16	0,22	0,16	0,14	0,04	0,09	0,08	0,14	-0,10	0,07	0,11	0,03	0,09	0,07	0,07	0,17			
40	0,18	0,08	0,31	0,04	0,14	0,11	0,30	-0,01	0,32	0,17	0,23	0,26	0,17	0,50	0,01	0,25	0,38	0,19	0,17		
41	0,45	0,25	0,33	0,21	0,32	0,57	0,47	0,22	0,52	0,13	0,46	0,16	0,41	0,38	0,34	0,51	0,49	0,14	0,27	0,33	

APPENDIX H: UNROTATED FACTORS

TABLE 24: UNROTATED FACTOR MATRIX

Respondent	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
1	0.55*	-0.15	0.31	0.07	0.29	0.07	0
2	0.63*	0.26	-0.08	0.03	-0.18	0.03	0
3	0.43*	-0.16	0.19	0.04	0.26	0.05	0.24
4	0.35*	-0.14	-0.43*	0.1	-0.03	0	0.24
5	0.51*	-0.08	-0.08	0.01	-0.47*	0.19	-0.17
6	0.38*	-0.16	0.31	0.07	0.23	0.04	-0.35*
7	0.47*	-0.15	-0.17	0.03	0.07	0	0.23
8	0.63*	-0.02	0.27	0.04	-0.11	0.01	0.17
9	0.56*	-0.4*	0.01	0.09	0.13	0.01	-0.33*
10	0.69*	-0.23	0.08	0.03	-0.16	0.02	0
11	0.14	0.15	0.02	0.01	0.23	0.04	-0.22
12	0.16	-0.11	0	0.01	0.19	0.03	0.21
13	0.25	0.07	0.13	0.01	0.15	0.02	0.13
14	0.44*	0.45*	-0.08	0.1	0.34*	0.1	-0.13
15	0.27	-0.35*	0.18	0.09	-0.22	0.04	-0.07
16	0.59*	-0.25	0.31	0.09	-0.28	0.06	0.27
17	0.43*	-0.02	-0.15	0.01	0.08	0.01	-0.26
18	0.11	0.39*	0.13	0.08	-0.25	0.05	0.06
19	0.56*	0.07	-0.38*	0.07	0.25	0.05	-0.06
20	0.49*	0.06	0.04	0	-0.14	0.01	0.03
21	0.49*	0.42*	-0.04	0.08	-0.26	0.05	0.17
22	0.27	0.29	0.01	0.04	-0.07	0	0.29
23	0.47	-0.09	-0.35*	0.06	-0.23	0.04	-0.16
24	0.31	0.33*	-0.28	0.08	0.18	0.03	0.21
25	0.39*	0.13	0.19	0.03	-0.15	0.02	-0.04
26	0.51*	0.36*	-0.09	0.06	-0.16	0.02	-0.2
27	0.54*	-0.18	-0.28	0.05	0.06	0	-0.22
28	0.36*	0.2	0.35*	0.08	-0.29	0.07	0.05
29	0.71*	-0.21	0.04	0.03	-0.19	0.03	-0.16
30	0.38*	-0.04	0.18	0.02	0.28	0.07	-0.06
31	0.62*	-0.33*	0.13	0.07	-0.03	0	-0.07
32	0.46*	-0.17	0.31	0.07	0.07	0	0.36*
33	0.54*	0.05	0.4*	0.09	0.21	0.04	-0.15
34	0.43*	-0.3	-0.43*	0.14	-0.1	0.01	-0.13
35	0.21	0.24	-0.24	0.05	-0.19	0.03	-0.08
36	0.51*	0	0.16	0.02	0.04	0	-0.12
37	0.66*	-0.17	-0.22	0.04	-0.03	0	0.09
38	0.3	0	-0.15	0.01	0.21	0.04	0.35*
39	0.26	0.31	-0.02	0.04	0.15	0.02	0.03
40	0.49*	-0.26	-0.24	0.06	0.13	0.01	0.16
41	0.74*	0.19	-0.06	0.01	-0.03	0	-0.28
Variance	22.3	5.2	4.9	0.4	3.9	0.2	3.6
Cum. Variance	22.3	27.6	32.5	32.9	36.8	37.1	40.7
Eigenvalue	9.2	2.2	2	0.2	1.6	0.1	1.5

* = significant factor loading at the 0.01 level.

Significant factor loading:

= 2.58 x (1÷√65)
= 0.32

APPENDIX I: EVALUATION AND ELIMINATION OF UNROTATED FACTORS

Several statistical tests exist to determine how many factors to retain in the final solution. These objective criteria should be applied as a guideline, as in Q-methodology the most important aspect is that the final solution is meaningful. If the final solution is statistically correct, but contains an overly large number of factors, that cannot be explained by the researcher, the solution is worthless. The same goes for the rigorous elimination of potentially interesting factors, just because they do not exactly fulfil all statistical rules.

A very important and often-used indicator of statistical significance of factors is the Kaiser-Guttman criterion. This states that the eigenvalue (EV) of a factor is indicative of a factor's statistical strength and explanatory power. If a factor has an EV lower than 1.00 this means that the extracted factor accounts for less study variance than one single Q-sort and therefore does not offer an effective reduction of the correlation matrix (Watts & Stenner, 2012). As can be seen in Table 24 factors 1,2,3,5 and 7 have EV's of higher than 1.00, but Factors 4 and 6 do not fulfil the Kaiser-Guttman criterion. This implies that Factor 4 and 6 should be eliminated from further analysis.

Another important and often applied principle is to only accept those factors that have two or more significant factor loadings after extraction. As can be seen in Table 24 again all factors fulfil this criterion, except for Factor 4 and 6. However, it must be stated that Factor 5 merely fulfils this criterion, with exactly two significant factor loadings (Q-sort 5 and Q-sort 14). It is already noticeable that Factor 1 is by far the dominant factor, with a large amount of significant factor loadings.

A complementary method that can help to determine an appropriate number of factors for your study is Humphrey's rule, which states that 'a factor is significant if the cross-product of its two highest loadings (ignoring the sign) exceeds twice the standard error' (Brown, 1980, p. 223).

TABLE 25: HUMPHREY'S RULE

Standard Error	$1/\sqrt{65} = 0.13$
Cross-product of two highest loadings Factor 1	0.71*0.74 = 0.53
Cross-product of two highest loadings Factor 2	0.45*0.42 = 0.19
Cross-product of two highest loadings Factor 3	-0.43*-0.43 = 0.18
Cross-product of two highest loadings Factor 4	0.14*0.09 = 0.01
Cross-product of two highest loadings Factor 5	-0.47*0.34 = 0.16
Cross-product of two highest loadings Factor 6	0.07*0.19 = 0.01
Cross-product of two highest loadings Factor 7	0.35*0.36=0.13

As can be seen from Table 25 only Factor 1 fulfils this strict rule. However, the same rule can be applied less strictly, by insisting that the cross-products simply need to exceed the standard error (Watts & Stenner, 2012). In that case, as also seen from the first two tests Factor 1,2,3,5 and 7 should be used for further analysis and Factors 4 and 6 should be eliminated.

Taking these three factor tests into consideration, it was decided to only analyse five factors after factor rotation, leaving away Factor 4 and 6. The five remaining factors can explain a total variance of just over 40%.

APPENDIX J: ROTATED FACTORS

TABLE 26: ROTATED FACTOR MATRIX

Respondent	Factor 1	Factor 2	Factor 3	Factor 4 (Factor 5 before rotation)	Factor 5 (Factor 7 before rotation)
1	0.42	0.00	0.07	0.46	0.35
2	0.23	0.54*	0.34	0.16	0.12
3	0.30	-0.01	0.04	0.22	0.48*
4	-0.01	0.10	0.49*	-0.16	0.34
5	0.44	0.29	0.46	-0.02	-0.15
6	0.35	-0.12	0.09	0.55*	0.00
7	0.17	0.09	0.35	0.02	0.41*
8	0.54*	0.30	0.11	0.16	0.29
9	0.40	-0.19	0.49	0.41	0.07
10	0.56*	0.15	0.40	0.14	0.20
11	-0.08	0.06	0.04	0.37*	-0.02
12	0.05	-0.05	0.04	0.04	0.33*
13	0.11	0.12	-0.04	0.17	0.25*
14	-0.16	0.41	0.16	0.54*	0.20
15	0.49*	-0.10	0.17	-0.01	-0.03
16	0.72*	0.18	0.14	-0.06	0.30
17	0.10	0.09	0.40*	0.32	0.01
18	0.08	0.47*	-0.12	-0.02	-0.09
19	-0.09	0.19	0.54*	0.32	0.31
20	0.30	0.30	0.22	0.11	0.13
21	0.16	0.67*	0.17	0.02	0.14
22	0.05	0.42*	-0.01	-0.04	0.25
23	0.15	0.18	0.61*	0.01	-0.03
24	-0.22	0.38	0.20	0.11	0.34
25	0.32	0.32	0.07	0.16	0.02
26	0.11	0.53*	0.31	0.26	-0.08
27	0.15	0.02	0.60*	0.25	0.10
28	0.44	0.42	-0.09	0.08	-0.02
29	0.55*	0.16	0.47	0.21	0.07
30	0.20	0.01	0.06	0.41*	0.23
31	0.55*	-0.02	0.36	0.23	0.19
32	0.48	0.08	-0.03	0.08	0.49
33	0.41	0.16	0.00	0.56*	0.17
34	0.12	-0.04	0.69*	0.00	0.07

* = defining factor loading, flagged by PQMethod

35	-0.06	0.35*	0.27	-0.01	-0.09
36	0.34	0.17	0.18	0.34	0.11
37	0.28	0.16	0.54*	0.09	0.33
38	-0.02	0.11	0.15	0.02	0.50*
39	-0.07	0.31*	0.03	0.24	0.16
40	0.16	-0.02	0.46*	0.06	0.42
41	0.26	0.41	0.46	0.44	0.03
Variance	10.05	7.39	10.44	6.45	5.83
Cum. Variance	10.05	17.45	27.89	34.34	40.17
Eigenvalue	4.12	3.03	4.28	2.64	2.39

APPENDIX K: A DESCRIPTION OF UNROTATED FACTOR 1 – THE DOMINANT VIEW

As seen in Appendix H, the unrotated Factor 1 was able to explain a large part of the variance among the stakeholders. Even though it is not common among Q-methodologists to discuss unrotated factors, such a large dominance of one view among stakeholders is quite uncommon and therefore worth some further analysis. Therefore this appendix describes into more detail how a respondent that loads high on unrotated Factor 1 would have rated the statements. The most important governance viewpoints of this dominant discourse can be summarised as follows:

- Even though the current informal consultations are functioning quite well regional governance should be formalised somewhat more by a regional public transport authority and a transparent metropolitan board for the AMA. A regional development company is not necessary at the moment, so SADC should stick with its task as development company in the Schiphol area.

TABLE 27: THE DOMINANT VIEW ON FORMALISING REGIONAL GOVERNANCE

Formalising regional governance	Unrotated Factor 1
53. A regional public transport authority is the base for a competing metropolitan region.	4
42. The AMA should get one transparent metropolitan board.	3
37. SADC should primarily concentrate on industrial areas in the Schiphol area.	3
47. Eventually the AMA should have one regional development company.	1
52. In 2020 there will be a AMA public transport authority.	1
43. The informal consultations in the AMA will split if it gets too exciting.	0
39. SADC should expand to become a development company of the AMA.	0

- Municipalities in the Schiphol region do not only have land profits in mind and are willing to collaborate in regional real estate coordination. However, municipalities' land ownership does play a large role in the decisions they make. Therefore, the general believe is that sometimes municipalities don't mind building within the noise contours, even though this might not be the best option for the quality of life of their inhabitants. In general there is a neutral attitude towards the Plabeka collaboration, it did not bring much change to the crisis on the real estate market.

TABLE 28: THE DOMINANT VIEW ON REGIONAL MUNICIPALITIES' LAND USE STRATEGIES

Trust in regional municipalities' land use strategies	Unrotated Factor 1
22. Policy decisions do not show enough distinction between the public spatial planning task and the land ownership: our own locations first!	2
31. If municipalities would get the freedom, they would completely fill the Schiphol Area up with buildings.	2

19. Thanks to Plabeka some balance is created on the commercial real estate market.	0
21. Plabeka shows that the region will only collaborate when there are big problems.	0
24. Governments in the Schiphol airport region act as profit-oriented enterprises.	-2
18. Plabeka was mainly used by interested parties to keep their own projects alive.	-2

- In this dominant discourse there is not much trust in the ability of the Province as a dominant party to overpower the regional governance. The national Government is rather seen as the right level to interfere with Schiphol-related issues. This is currently already done through short lines between Schiphol, KLM and the Ministry of I&E, which is - as explained earlier - not necessarily a bad thing.

TABLE 29: THE DOMINANT VIEW ON HIERARCHICAL POWER BY PROVINCE AND NATIONAL GOVERNMENT

Trust in hierarchical power by Province and National Government	Unrotated Factor 1
29. The most important decisions about Schiphol and the region are made through short lines with the Ministry of I&E.	3
9. The Province lost its control on the Schiphol file.	1
8. State officials do not have enough knowledge.	-1
28. The national Government is delegating more and more Schiphol files.	-1
30. After the proposed fusion of Provinces, the new Province will be able to offer more counterweight to Amsterdam and Schiphol.	-3
27. The national Government should interfere with Schiphol policy as little as possible.	-4

- When it concerns the parties that should be involved in regional decision-making, the dominant discourse finds it important that environmental parties, companies and knowledge institutes are represented in governance arrangements. As Schiphol is of national importance whenever a decision is made on the growth of Schiphol this is not solely up to local administrators, to collaborative arrangements in the region or to Amsterdam.

TABLE 30: THE DOMINANT VIEW ON PARTIES THAT SHOULD BE INVOLVED IN REGIONAL DECISION-MAKING

Parties that should be involved in decision-making	Unrotated Factor 1
40. The Environmental Council should also include a nature party.	2
45. Companies and knowledge institutes should co-decide on the investments of the Amsterdam Economic Board.	2
41. The Environmental Council should also include a farmers' party.	0
16. Local administrators and interest groups should decide jointly on the growth of Schiphol.	-2

10. Amsterdam should take the lead in Schiphol-related issues.	-3
13. All parties are represented by the municipality and do not need their own representatives in the Schiphol governance bodies.	-3
15. Eventually the local administrators in the BRS should decide on the growth of Schiphol.	-4
11. It is important that citizens express themselves in a referendum before any expansion of Schiphol.	-5

Concerning substantive topics on Schiphol, the dominant discourse on the region can be summarised as follows:

- Schiphol and its role as Gateway to Europe is increasingly essential for the regional economy. The hub-function of KLM is very important herein and this relationship is expected to stay in place in the future as well. However, even though KLM is an important employer in the region, other airlines and services bring employment as well.

TABLE 31: THE DOMINANT DISCOURSE ON THE IMPORTANCE OF SCHIPHOL AND KLM

Importance of Schiphol and KLM	Unrotated Factor 1
4. If KLM loses its hub status at Schiphol, the regional economy will suffer severely.	5
1. A well-connected airport is the most important factor for our metropolitan economy.	4
33. KLM creates employment here, other airlines barely do.	-1
5. Schiphol as 'Gateway to Europe' is less important for the AMA than 10 years ago.	-4
34. In the future KLM will not be a dominant party at Schiphol anymore.	-4
2. The importance of Schiphol's international network is overestimated.	-5

- As seen earlier, also in the dominant discourse noise is a big issue in regional policy. The majority of the respondents finds it important that housing is rather built by densification of existing living areas, even if there would be potential buyers for new housing within the noise contours. Again, the idea of local noise limits is not supported, as noise is seen as too important to deal with locally.

TABLE 32: THE DOMINANT DISCOURSE ON NOISE

Noise	Unrotated Factor 1
58. Future housing in the AMA should be rather built by densification than by building closer to Schiphol.	5
50. In the future noise measurements should be performed by an independent institute.	4

56. No new residential areas should be constructed within the noise contours.	2
57. It is up to the market whether there is a need for dwellings within the noise contours.	-3
49. Only by using local noise limits local governments can influence the flight behaviour at Schiphol.	-5

- When it comes to sustainability, it is noticeable that even though most respondents agree that Schiphol should be more concerned with its direct environment and is not sustainable enough yet, sustainability is not given a large priority as a policy issues. This was also apparent during the Q-sort sessions, as the statements on sustainability often started in the extreme edges, but moved to the middle towards the end of the session as other issues were given priority.

TABLE 33: THE DOMINANT DISCOURSE ON SUSTAINABILITY

Sustainability	Unrotated Factor 1
36. Schiphol should be more concerned with its direct environment, such as spatial, water, energy and waste issues.	3
61. Local farmers should play a role in the processing of Schiphol's bio waste.	1
54. Farmers should get paid to maintain the landscape around Schiphol, instead of having to pay for land lease.	0
63. If Schiphol really wants to emit less CO_2, they should refuse more polluting aircrafts.	0
64. At the moment Schiphol is sustainable enough.	-1
55. Farmers should get a prominent role again in the development of Schiphol, just like *"Schiphol farmers"* in the past.	-2
62. I don't care whether the meals of airlines come from this region or not.	-2

- Finally, the majority of the respondents also had an outspoken opinion on land use policy, as they found it crucial that governments invest in infrastructure and area development. The general opinion is that Schiphol should develop further as AirportCity and all possible new companies should be allowed to settle in the area. The spatial concepts of selective settlement policy, airport corridor and SMASH were generally not very well known among all respondents and therefore often ended up in the neutral area.

TABLE 34: THE DOMINANT DISCOURSE ON REGIONAL LAND USE POLICY

Regional Land Use Policy	Unrotated Factor 1
6. For the development of the region governments need to invest in infrastructure and area development.	5

59. Schiphol should develop further as AirportCity.	4
26. Selective settlement policy (Schiphol binding, Port binding, Flowers binding) is outdated and should be abolished.	1
60. The Amsterdam region should develop itself along the airport corridor.	1
46. The spatial models by SMASH do not go far enough for me.	0
48. I think that it is better if Schiphol does not develop any real estate outside the Schiphol territory (outside the fence).	0
3. We should only add new Schiphol destinations if this attracts new companies.	-3

APPENDIX L: FACTOR ARRAYS OF THE FIVE ROTATED FACTORS

TABLE 35: FACTOR ARRAYS OF THE FIVE ROTATED FACTORS ON GOVERNANCE STATEMENTS

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
8. State officials do not have enough knowledge.	-2	2	0	1	-3
9. The Province lost its control on the Schiphol file.	3	4	1	-1	-3
10. Amsterdam should take the lead in Schiphol-related issues.	1	-2	-2	-3	-3
11. It is important that citizens express themselves in a referendum before any expansion of Schiphol.	-5	-3	-3	-5	-4
12. Regional decisions (BFS, Plabeka, AMA) are characterised by a democratic deficit.	-2	2	0	-1	-1
13. All parties are represented by the municipality and do not need their own representatives in the Schiphol governance bodies.	-2	-4	-1	-4	-1
14. The BRS can be abolished after the establishment of the Environmental Council.	0	1	2	-2	1
15. Eventually the local administrators in the BRS should decide on the growth of Schiphol.	-4	-1	-3	0	-3
16. Local administrators and interest groups should decide jointly on the growth of Schiphol.	-4	-5	1	1	0
17. At the Alders Table no comprehensive considerations are made: they only talk about noise.	-2	1	-2	1	0
18. Plabeka was mainly used by interested parties to keep their own projects alive.	0	-3	-1	3	-3
19. Thanks to Plabeka some balance is created on the commercial real estate market.	2	-2	0	-3	1
20. Vacancy and overcapacity on the real estate market is mainly a problem for the market parties.	-1	2	1	-2	0
21. Plabeka shows that the region will only collaborate when there are big problems.	-1	-4	-1	2	-2
22. Policy decisions do not show enough distinction between the public spatial planning task and the land ownership	-3	4	3	5	-1
23. The BFS should be revived as soon as possible.	-2	-2	-1	-3	-2
24. Governments in the Schiphol Airport Region act as profit-oriented enterprises.	-3	-1	0	-4	-4
25. Municipalities like Amstelveen, Aalsmeer and Haarlem should be included in the BFS.	-3	1	-1	1	0
27. The national Government should interfere with Schiphol policy as little as possible.	-4	-2	-5	-2	-5
28. The national government is delegating more and more Schiphol files.	-2	-1	0	2	-1
29. The most important decisions about Schiphol and the region are made through short lines with the Ministry of I&E.	2	5	1	1	3
30. After the proposed fusion of Provinces, the new Province will be able to offer more counterweight to Amsterdam and Schiphol.	-1	-4	-1	-1	1
31. If municipalities would get the freedom, they would completely fill the Schiphol Area up with buildings.	0	-1	4	2	0

35. If the BFS is abolished, Schiphol should become a formal party in AMA governance bodies.	0	0	-1	-1	1
37. SADC should primarily concentrate on industrial areas in the Schiphol area.	1	2	4	-2	4
38. The shareholders of SADC give sufficient direction.	1	-1	2	0	1
39. SADC should expand to become a development company of the AMA.	2	-3	-3	0	-2
40. The Environmental Council should also include a nature party.	-1	2	3	0	-1
41. The Environmental Council should also include a farmers' party.	-1	1	2	-2	-2
42. The AMA should get one transparent metropolitan board.	2	5	0	2	-2
43. The informal consultations in the AMA will split if it gets too exciting.	3	0	-2	0	0
44. To get some speaking time with the mayor, it is best for a company or knowledge institute to participate in the AEB	1	-2	-2	-1	2
45. Companies and knowledge institutes should co-decide on the investments of the Amsterdam Economic Board.	0	0	2	4	3
47. Eventually the AMA should have one regional development company.	4	3	-4	0	-4
51. For our organisation it is for the best that the partial privatisation of Schiphol did not take place.	4	3	4	1	-1
52. In 2020 there will be a AMA public transport authority.	2	1	2	2	2
53. A regional public transport authority is the base for a competing metropolitan region.	4	1	3	2	2
65. Public companies (Schiphol, SADC, Port) should be treated by governments as market parties.	-2	3	-1	3	4

TABLE 36: FACTOR ARRAYS OF THE FIVE ROTATED FACTORS ON SUBSTANTIVE STATEMENTS

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1. A well-connected airport is the most important factor for our metropolitan economy.	5	0	5	5	1
2. The importance of Schiphol's international network is overestimated.	-5	-2	-5	-3	0
3. We should only add new Schiphol destinations if this attracts new companies.	-4	-3	-2	-2	-5
4. If KLM loses its hub status at Schiphol, the regional economy will suffer severely.	5	0	5	4	4
5. Schiphol as 'Gateway to Europe' is less important for the AMA than 10 years ago.	-5	-4	-4	-2	-2
6. For the development of the region governments need to invest in infrastructure and area development.	4	3	5	3	5
7. Governments mainly need to invest in the improvement of collaboration between companies in the 7 clusters defined by the AEB	2	1	0	3	0

26. Selective settlement policy (Schiphol binding, Port binding, Flowers binding) is outdated and should be abolished.	3	-1	-3	-1	0
32. Relevant aviation decisions are not made in the Netherlands anymore, but in Paris, Brussels and Dubai.	3	0	-2	3	3
33. KLM creates employment here, other airlines barely do.	0	0	1	2	-1
34. In the future KLM will not be a dominant party at Schiphol anymore.	-3	0	-4	-4	0
36. Schiphol should be more concerned with its direct environment, such as spatial, water, energy and waste issues.	0	4	1	1	2
46. The spatial models by SMASH do not go far enough for me.	-1	0	2	-4	2
48. I think that it is better if Schiphol does not develop any real estate outside the Schiphol territory (outside the fence).	0	2	0	-1	2
49. Only by using local noise limits local governments can influence the flight behaviour at Schiphol.	-3	-2	-4	-5	-4
50. In the future noise measurements should be performed by an independent institute.	-1	5	3	4	4
54. Farmers should get paid to maintain the landscape around Schiphol, instead of having to pay for land lease.	1	1	0	0	-2
55. Farmers should get a prominent role again in the development of Schiphol, just like *"Schiphol farmers"* in the past.	-1	-1	0	0	-5
56. No new residential areas should be constructed within the noise contours.	0	2	4	-5	2
57. It is up to the market whether there is a need for dwellings within the noise contours.	1	-5	-5	0	5
58. Future housing in the AMA should be rather built by densification than by building closer to Schiphol.	5	4	3	-1	5
59. Schiphol should develop further as AirportCity.	3	-1	-2	1	0
60. The Amsterdam region should develop itself along the airport corridor.	2	0	-3	4	1
61. Local farmers should play a role in the processing of Schiphol's bio waste.	0	0	2	0	1
62. I don't care whether the meals of airlines come from this region or not.	0	-3	0	0	3
63. If Schiphol really wants to emit less CO_2, they should refuse more polluting aircrafts.	1	3	1	5	3
64. At the moment Schiphol is sustainable enough.	1	-5	1	-3	-1

APPENDIX M: STATEMENTS LINKED TO THE FIVE ISSUES

As the 65 statements of the Q-methodology research were set up for the purpose of the Better Airport Regions-project and not for this specific research, not all statements are as useful to study the five governance issues defined in this study. In the following the statements are defined that can provide us with a better insight into stakeholder perspectives on the five issues defined in Chapter 5. Some of the statements are relevant for more than one issue. Not only the factor scores of the five perspectives on these statements give us more insight, but also the oral explanation that was expressed during the Q-sort sessions

Issue 1: Inefficiency due to fragmentation and redundancy
14. The BRS can be abolished after the establishment of the Environmental Council.
17. At the Alders Table no comprehensive considerations are made: they only talk about noise.
23. The BFS should be revived as soon as possible.
40. The Environmental Council should also include a nature party.
41. The Environmental Council should also include a farmers' party.
42. The AMA should get one transparent metropolitan board (also relevant for Issue 4).
47. Eventually the AMA should have one regional development company (also relevant for Issue 3).
52. In 2020 there will be a AMA public transport authority.

Issue 2: Lack of democratic principles
11. It is important that citizens express themselves in a referendum before any expansion of Schiphol.
12. Regional decisions (BFS, Plabeka, AMA) are characterised by a democratic deficit.
13. All parties are represented by the municipality and do not need their own representatives in the Schiphol governance bodies.
15. Eventually the local administrators in the BRS should decide on the growth of Schiphol.
16. Local administrators and interest groups should decide jointly on the growth of Schiphol.

Issue 3: Lack of comprehensive decision-making on land use themes
6.   For the development of the region governments need to invest in infrastructure and area development.
19.   Thanks to Plabeka some balance is created on the commercial real estate market.
22.   Policy decisions do not show enough distinction between the public spatial planning task and the land ownership: our own locations first!
26.   Selective settlement policy (Schiphol binding, Port binding, Flowers binding) is outdated and should be abolished.
31. If municipalities would get the freedom, they would completely fill the Schiphol Area up with buildings.
39. SADC should expand to become a development company of the AMA.
47. Eventually the AMA should have one regional development company (also relevant for Issue 1).
56. No new residential areas should be constructed within the noise contours.
57. It is up to the market whether there is a need for dwellings within the noise contours.
58. Future housing in the AMA should be rather built by densification than by building closer to Schiphol.
59. Schiphol should develop further as AirportCity.
60. The Amsterdam region should develop itself along the airport corridor.

Issue 4: Need for hierarchy
8.   State officials do not have enough knowledge.
9.   The Province lost its control on the Schiphol file.
10.   Amsterdam should take the lead in Schiphol-related issues.
27.   The national government should interfere with Schiphol policy as little as possible.

28. The national government is delegating more and more Schiphol files.
30. After the proposed fusion of Provinces, the new Province will be able to offer more counterweight to Amsterdam and Schiphol.
42. The AMA should get one transparent metropolitan board (Also relevant for Issue 1).
43. The informal consultations in the AMA will split if it gets too exciting.

Issue 5: General feeling of tension
4. If KLM loses its hub status at Schiphol, the regional economy will suffer severely.
5. Schiphol as 'Gateway to Europe' is less important for the AMA than 10 years ago.
18. Plabeka was mainly used by interested parties to keep their own projects alive.
21. Plabeka shows that the region will only collaborate when there are big problems.
22. Policy decisions do not show enough distinction between the public spatial planning task and the land ownership: our own locations first!
24. Governments in the Schiphol Airport Region act as profit-oriented enterprises.
29. The most important decisions about Schiphol and the region are made through short lines with the Ministry of I&E.
32. Relevant aviation decisions are not made in the Netherlands anymore, but in Paris, Brussels and Dubai.
33. KLM creates employment here, other airlines barely do.
34. In the future KLM will not be a dominant party at Schiphol anymore.