

**BACHELOR THESIS** 

# A RESEARCH INTO A SYNERGISTIC PUBLIC-PRIVATE PARTNERSHIP FOR THE AMSTERDAM LIFE SCIENCES DISTRICT

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# **Preface**

In front of you lies the final report of my bachelor thesis, titled 'A research into a synergistic public-private partnership for the Amsterdam Life Sciences District.' This thesis marks the conclusion of my bachelor Civil Engineering at the University of Twente. I carried out this research at APPM management consultants. In this research I delved into the interests and collaboration dynamics of public and private parties within the Amsterdam Life Sciences District to provide recommendations for a synergistic public-private partnership in the district. I hope these recommendations will contribute to the further development of the Amsterdam Life Sciences District.

Throughout my graduation period, I had the opportunity to develop skills beyond what I had learned during the rest of my bachelor study. Besides that, I enjoyed the experience of working in an office environment at APPM, gaining insight into how it is to work at a company.

For that and for giving me the opportunity to graduate I want to thank APPM. I would like to give a special thanks to my external supervisor at APPM, Alexander Smal. He has supported and guided me extensively during my graduation period. I would also like to extend my gratitude to my internal supervisor Andreas Hartmann from the University of Twente for his support and helpful feedback, which significantly contributed to the quality of this thesis.

I hope that you will enjoy reading my thesis.

Maaike Uijttenboogaard Enschede, 15 July 2023

# **Summary**

The Amsterdam Life Sciences District (ALSD) serves as a thriving ecosystem for health-tech innovation and entrepreneurship, fostering collaboration between businesses, research, and patient care. It is appointed by the municipality of Amsterdam as an area that has the potential to grow into an innovation district. It houses a diverse mix of knowledge institutions and life sciences and health sector businesses. The main stakeholders in the ALSD include the municipality of Amsterdam, the AUMC and real estate developers. The different public and private parties already work together to some extent, but an opportunity lies in establishing an overarching organisation. An effective governance structure would primarily stimulate the network assets in the district.

The research objective of this research is to analyse the interests and collaboration dynamics of public and private parties within the ALSD to provide recommendations regarding a synergistic public-private partnership (PPP) for the ALSD. This research focuses not on the entirety of a governance structure but on one specific aspect namely the relation between the interests of the stakeholders and a synergistic PPP. A partnership brings together diverse stakeholders, enabling them to leverage their strengths and resources to drive collaboration, economic growth and innovation. Innovation districts benefit from the support, leadership, and financial backing of both the public and private sectors. In a PPP synergistic results can occur that create added value and maximize the collective impact.

Overall, the methodology of this research consisted of conducting a field study to gather practical data, comparing the outcomes with existing literature, and providing recommendations informed by both the literature and the observed practices.

It was found that the collaboration dynamics in the ALSD align with some of the successful factors and challenges identified in the literature on PPPs. The recognition of mutual goals and seeking public support are positive aspects that align with successful factors. However, the presence of differing interests, the need for clearer coordination, and the unique challenges of strategic location management and tenant exploration options present areas for improvement.

The collaboration in the ALSD currently faces challenges due to the absence of a mutual goal and clear, jointly undertaken actions. Differences in interests, visions, and risk perceptions among the parties hinder progress. Financial difficulties and lengthy processes also contribute to the existing challenges. However, also benefits are observed in for example knowledge distribution. The level of steering and desired collaboration agreements are unclear, and private entities may feel unheard or perceive a lack of genuine interest in collaboration from the public sector. Overall, the formation and effective operation of a synergistic public-private partnership in the ALSD are currently hindered by differing interests among stakeholders. Addressing these challenges and fostering a more supportive collaborative environment can enhance the potential for a synergistic PPP.

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# List of abbreviations

AHTC = Amsterdam Health & Technology Centre

AHTI = Amsterdam Health & Technology Institute

ALSD = Amsterdam Life Sciences District

AMC = Academic Medical Centre

AUMC = Amsterdam University Medical Centre

BIZ = Business Investment Zone

EZ = Economische Zaken

GIID = Global Institute on Innovation Districts

MBP = Medical Business Park

PPP = Public-private partnership

UvA = University of Amsterdam

VU = Vrije Universiteit

VUmc = VU medical centre

# 1. Introduction

#### 1.1. Problem context

In the evolving knowledge and technology-driven economy, the value and function of density and proximity are being transformed. The rise of open innovation and shifting demographic dynamics are driving the demand for innovation districts (Katz and Wagner, 2014). An innovation district is a new type of urban area designed to meet the needs of people, knowledge institutions, and companies. The concept is built on the understanding that people, knowledge institutions, and companies benefit from being located in each other's proximity.

An innovation district brings together leading-edge anchor institutions, such as research universities and research-oriented medical hospitals, with companies, start-ups, incubators, and accelerators (Katz and Wagner, 2014). This clustering and connectivity foster an environment conducive to collaboration, economic growth, and innovation (Kayanan, 2021). Each innovation district has its own unique combination of economic, spatial and network assets. Economic assets, including firms and organisations, are the driving force of the area, while spatial assets encompass the designed infrastructure that can stimulate connectivity and innovation.

Network assets, which are the relationships between individuals, firms, and institutions, play a crucial role in advancing ideas within innovation districts. Effective governance structures are essential to stimulate and expand these networks (Gemeente Amsterdam, 2023; Katz and Wagner, 2014; Wagner, 2023). Governance facilitates among other things common branding and guides the growth of the district by attracting valuable companies and institutions (Gemeente Amsterdam, 2023). Having a strong governance structure is also one of the components of the GIID framework to develop innovation districts.

The combination of economic, spatial, and network assets, along with a supportive and risk-taking culture, creates an innovation ecosystem within the district (Katz and Wagner, 2014). It is important to note that while innovation districts may share similar physical geography or institutional platforms, their opportunities for growth can differ significantly.

PPPs are collaborative arrangements between the public sector and private entities in an area to achieve common goals and share resources in a mutually beneficial manner (Runde, 2006). In line with other PPPs, innovation districts benefit from the support, leadership, and financial backing of both the public and private sectors (Kayanan, 2021). These partnerships bring together diverse stakeholders, enabling them to leverage their strengths and resources to drive collaboration, economic growth and innovation.

A PPP involves cooperation and resource-sharing but does not necessarily emphasize the generation of synergies or mutual benefits beyond the immediate project. By combining the expertise and resources of the private partner with the administrative and political power of the governmental partner synergistic results can occur (Bundi, 2015). A synergistic PPP goes a step further by actively seeking and harnessing synergies between the public and private sectors to create added value and maximize the collective impact. A synergistic PPP focuses on creating mutually beneficial outcomes, generating broader economic, social, or environmental benefits, and can accelerate innovation (Vlaams Kenniscentrum PPS et al., 2014).

#### 1.2. Amsterdam Life Sciences District

The municipality of Amsterdam focuses on different urban areas in Amsterdam that have the potential to grow into an innovation district (Gemeente Amsterdam, 2023). One of these areas is the Amsterdam Life Sciences District (ALSD). The ALSD is located in the southeastern part of Amsterdam and offers a mix of working and living. The area contains a mix of knowledge institutions and businesses in the life sciences and health sector.

The ALSD aims to create a vibrant ecosystem for health-tech innovation and entrepreneurship in Amsterdam (Gemeente Amsterdam, 2023). The strong connection between businesses, research, and patient care is a key strength of the ALSD. Established and emerging companies are quickly developing and bringing their innovations to patient care. Additionally, the ALSD attracts new companies ranging from startups to major players in the life sciences sector.

According to Gemeente Amsterdam (2023) to further grow the economic assets, it is important for the ALSD to continue focusing on the life sciences sector. Currently, there is a lack of office and laboratory space for small-scale businesses and startups. Developing shared laboratory facilities will present opportunities for growth. Furthermore, some existing workspaces are occupied by companies that are not active in or affiliated with the life sciences sector. The availability of these workspaces provides a chance to increase the critical mass of life sciences activities.

Several spatial developments have already taken place in the area. For example, the new entrance of the AUMC is designed to provide a pleasant and safe pedestrian connection between public transportation and the hospital. However, there is still room for improvement in the spatial assets of the ALSD. The area is currently dominated by cars and parking, resulting in few attractive public spaces for pedestrians. Moreover, there are limited opportunities for residents and employees to gather or have amenities where they can come together. For the Meibergdreefzone, which currently forms a separation between the AUMC and Paasheuvelweggebied, a project is already in place to transform this zone into a green zone with different facilities, such as sports facilities.

A significant opportunity lies in establishing an overarching organisation with the objective of strengthening the district. While various network organisations are already working in the district, an overarching organisation would facilitate better collaboration among them.

The municipal priorities are focused on the following action points (Gemeente Amsterdam, 2023):

- Action 1: Establish a structure for overarching collaboration.
- Action 2: Continue the specialisation strategy.
- Action 3: Develop a plan for the western area of Amsterdam UMC's location AMC.

#### 1.2.1. Overview ALSD

As can be seen in figure 1 the area can be divided into three main parts. The northern part of the district is the Paasheuvelweggebied. The Paasheuvelweggebied is also part of the Amstel III neighbourhood. The area contains a lot of businesses and startups, but also provides housing and other facilities.

The driving factor of the area, the Amsterdam University Medical Centre (AUMC), can be found in the centre of the area. Below the AUMC, the Medical Business Park (MBP) is being developed by the AUMC and the municipality of Amsterdam. The MBP will provide around 100.000 square metres of laboratory and office buildings. The MBP consists of a total of seven plots that will be allocated to different parties.

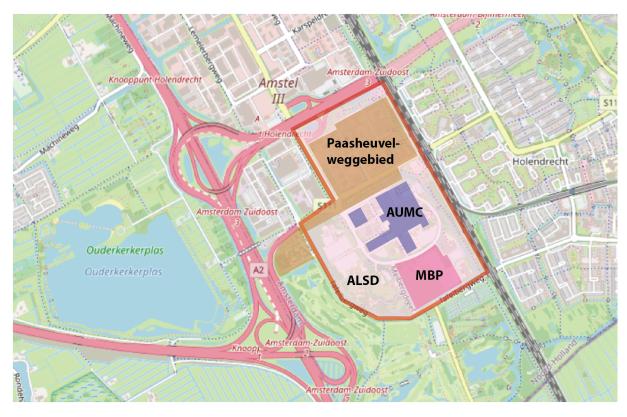


Figure 1: Overview Amsterdam Life Sciences District (OpenStreetMap, 2023)

#### 1.2.2. Public party

The municipality of Amsterdam, as the main public party in the area, plays a crucial role in steering the innovation district. Operating at the local level, the municipality exercises influence and fulfills various roles.

As the competent authority, the municipality holds decision-making power and regulatory control over the district. This includes responsibilities such as making zoning plans, issuing permits, and ensuring compliance with building codes and regulations. The municipality's involvement in these processes shapes the physical development and infrastructure within the district. In addition, the municipality fulfills other roles like housing policy, public space management and social welfare.

The Economic Affairs (EZ) department focuses on stimulating the knowledge economy and managing the citys growth. EZ is the department that companies or startups usually approach if they want a spot in the district.

Lastly, an example the municipality of Amsterdam is responsible for is the creation of the strategy document for innovation districts in Amsterdam. This document is an elaboration of the Omgevingsvisie Amsterdam 2050. It aims to promote the development of knowledge quarters and campuses into innovation districts within the city, while contributing to societal challenges such as energy transition and housing shortages (Gemeente Amsterdam, 2023).

#### 1.2.3. Semi-public party

The AUMC acts both as a public and private party in the area. They are not profit-driven and focus on serving the public interest. The AUMC combines patient care with education and scientific research. As an academic hospital they operate in the healthcare sector, which typically falls under the public domain. However, academic hospitals often have characteristics of private enterprises. They tend to operate under a business model and generate revenue. This multifaceted nature allows academic hospitals to leverage their public status for accessing funding and regulatory support, while embracing entrepreneurial approaches to healthcare and research.

The Academic Medical Centre (AMC) and VU medical centre (VUmc) were already working closely beside each other, but in 2018 they merged together into Amsterdam UMC. The AUMC represents the medical faculties of the two associated universities: the University of Amsterdam (UvA) and the Vrije Universiteit Amsterdam (VU).

#### 1.2.4. Private parties

The AUMC and the municipality of Amsterdam have already selected a real estate developer to develop laboratory and office spaces on one of the plots within the MBP. The first building that has been delivered is a multi-tenant building for the growth of life sciences and health companies and institutes. Having this building in the proximity of the AUMC is among other things beneficial for educational and research purposes.

An important asset management project by a real estate developer on the other side of the ALSD is the Amsterdam Health & Technology Centre (AHTC) located on Paasheuvelweg 25. In this building the Amsterdam Health & Technology Institute (AHTI) has taken up residence. AHTI is a public-private open innovation institute and is often mentioned as the driving force behind the ALSD. It was kick-started by the municipality of Amsterdam in 2014 with the ambition to improve the value of healthcare delivery, reduce pressure on the Amsterdam healthcare sector, and maintain cost control (ahti, 2020). The key skills within AHTI include project and program management, business and program development (including acquisition), data analysis and visualisation, stakeholder management, and communication (ahti, 2020). They encourage startups and scale-ups in their health-tech accelerator program HealthInc and provide office space through the Amsterdam Venture Studios located at the AHTC.

Besides that, AHTI is also part of the Business Investment Zone (BIZ) in the Paasheuvelweggebied. The BIZ is a cooperation between different real estate management companies that want to make the real estate environment in the Paasheuvelweggebied more attractive and economically stronger. It was set up because there was a need for more connection, mix-used development and strategic approach in the area.

#### 1.3. Problem statement

The ALSD is already a thriving ecosystem for health-tech innovation and entrepreneurship, driven by strong collaboration between businesses, research and patient care. However, there are still several points for improvement. The municipality of Amsterdam stresses that a significant opportunity lies in establishing an overarching organisation. While various network organisations are already working in the district, an overarching organisation would facilitate better collaboration among them and can play a role in attracting other businesses and start-ups. As mentioned in section 1.1 effective governance structures are essential to stimulate and expand networks and help guide the growth of the district. In the northern part a couple of businesses are already united in the BIZ Paasheuvelweggebied. However, something like the BIZ does not exist for the ALSD. The Paasheuvelweggebied, MBP and AUMC do not form one unified entity.

The innovation district would benefit from a synergistic PPP in order to establish an overarching organisation. However, the formation of a PPP brings together diverse interests from both the public and private sectors, requiring alignment to a certain extent to generate synergies. It is uncertain whether the public and private parties in the ALSD are able to have a synergistic PPP and how such a partnership would look like. Understanding the interests of all stakeholders is vital in identifying potential overlaps, complementariness, and conflicts, which could impact the establishment of an effective governance structure.

# 1.4. Research objective

The research objective is to analyse the interests and collaboration dynamics of public and private parties within the ALSD to provide recommendations regarding a synergistic PPP for the ALSD.

# 1.5. Research questions

The main research question is as follows:

To what extent can a synergistic public-private partnership be formed in the ALSD?

The following sub-research questions provide a framework for further investigation, allowing for a detailed exploration of stakeholder dynamics, challenges, and potential improvements within the ALSD.

- 1. What are the interests and objectives of the main stakeholders in the Amsterdam Life Sciences

  District?
- 2. How does the current collaboration between public and private parties within the Amsterdam Life Sciences District look like?
- 3. What are challenges regarding collaboration faced by the main stakeholders within the Amsterdam Life Sciences District?

# 1.6. Research scope

As the creation of an entire governance structure for the ALSD would be beyond the scope of a Bachelor Thesis, this research focuses on one specific aspect, namely the relation between the interests of the stakeholders and a synergistic PPP. The research will delve into the interests and objectives of the key public and private stakeholders operating within the ALSD, exploring how these interests may align or diverge. By investigating the dynamics of collaboration and perspectives on collaboration among these stakeholders, the research intents to identify factors that positively or negatively impact the formation and functioning of a synergistic PPP.

# 1.7. Methodology

The first step of this research involved gathering information from literature on PPPs. The literature research focused on examining the benefits of PPPs, identifying successful factors, and exploring the challenges associated with such partnerships. The findings from the literature study were analysed to draw general conclusions regarding PPPs.

The subsequent step entailed investigating how PPPs were organised in practice, with a specific focus on the area of the ALSD. Information was collected about how the ALSD is organised, along with identifying successful factors and challenges regarding the cooperation between different parties in the area. Furthermore, diverse perspectives on synergistic PPPs and overarching cooperation were gathered.

Five interviews were conducted with various (semi-)public and private parties within the ALSD to gather this information. A paraphrased version of a selection of these interviews can be found in Appendix A. In addition to the interviews, the website of the ALSD and the Strategy Innovation Districts document were consulted to gather information.

The research approach for the interviews was a qualitative interview. The interviews were semi-structured. Beforehand, a list with generally phrased questions was compiled, which addressed the following topics. The list of questions can be found in Appendix B.

- · Public-private partnerships in the ALSD
  - Origin
  - Interests
  - (Common) goals
  - Risks
  - Regulatory matters
  - Challenges
  - Future-oriented vision
- Synergy
  - Current situation
  - Essential factors
- · Innovation district
  - Changes compared to before the ALSD was labeled an innovation district
  - Desired mix of spatial and network assets
- Vision/ideas on overarching cooperation (1st action point ALSD in strategy document)

After gathering practical insights, the outcomes have been compared and contrasted with the existing literature. Based on this analysis, recommendations and insights were formulated, drawing from the literature and practical findings.

# 2. Literature study public-private partnerships

# 2.1. Benefits of a public-private partnership

Parties enter into a PPP for several reasons since PPP structures can offer multiple benefits. In this section a few key advantages are outlined.

Firstly, risk sharing is an important benefit for parties that want to pursue common objectives (Runde, 2006). The sharing of risks can allow for a more balanced approach to managing uncertainties and can lessen the burden on the public sector in terms of money (Gerrard, 2001). The risk-management capability of private parties encompasses a comprehensive evaluation of all relevant risks, particularly focusing on the potential commercial and financial impacts (Beckers and Stegemann, 2001).

Secondly, a PPP can make projects more effective and efficient (Beckers and Stegemann, 2001; Runde, 2006). Private companies typically have a focus on maximizing efficiency and minimizing costs, leading to better management practices and enhanced service quality for the public. Besides making projects more effective, PPP can also accelerate progress (Beckers and Stegemann, 20011; Runde, 2006).

Another important benefit of PPPs is financial resources. PPPs provide public parties access to additional capital from private sector sources. This includes equity, debt, and other financial resources that might not be available through traditional public funding mechanisms. Such access to private sector financing can enable the realisation of large-scale projects that would otherwise be beyond the financial capacity of public sector budgets alone (Gerrard, 2001; Marques de Sá, 2017; Runde, 2006). By engaging in a PPP, the financial burden of a project can be spread out over an extended period. This approach can alleviate the immediate strain on public funds and can free up limited public funds for investment in areas where private investment is not feasible or suitable. However, PPPs should not be viewed as a solution for public-sector budget constraints or financing gaps, but rather as a tool to deliver more effective and cost-efficient projects and associated services (Beckers and Stegemann, 2001; Esposito and Dicorato, 2020).

The private sector's involvement in PPP projects also brings innovation, advanced technologies, and specialised expertise. This infusion of new ideas and technological advancements can among other things improve services (Beckers and Stegemann, 2001; Runde, 2006).

Lastly, as mentioned in section 1.1 synergy can be an added value to a PPP and a reason for parties to enter a PPP in the first place. By harnessing the combined strengths of both partners, a synergistic PPP can generate greater value and achieve outcomes that surpass what each partner could have accomplished individually.

#### 2.2. Successful factors

In literature several papers have been written about PPPs and what elements are important in order to make such a structure work. This section summarizes topics that are mentioned more frequently.

#### **Mutual goals**

Clear goals or lack of them in general can hinder any PPP (Bundi, 2015). It helps align expectations and establishes a common understanding of what needs to be achieved (Bult-Spiering and DeWulf, 2006). Besides that, it can serve as a benchmark against which progress and performance can be assessed. Having clear mutual goals helps in other conditions, such as transparency, accountability, social support and risk management. Private parties are often held accountable for focusing too much on profit optimisation. In order to increase the change of a successful PPP this is not desirable (Deloitte, 2017).

#### Mitigation financial risks

By sharing risks between the public and private sectors, the financial burden can be spread out, reducing the potential impact on a single party (Bult-Spiering and DeWulf, 2006; Demirag et al., 2011).

#### Allocation of risks

Each party brings different strengths and capabilities to the table. By appropriately allocating risks based on each party's ability to manage them, PPPs can achieve a more efficient allocation of resources and expertise (Beckers and Stegemann, 2001; Bult-Spiering and DeWulf, 2006; Chou and Pramudawardhani, 2015; Wang et al., 2004; Marques de Sá, 2017). PPPs that do not properly allocate risks and benefit from the private sectors risk-management capabilities are unlikely to meet the anticipated outcomes (Beckers and Stegemann, 2001).

#### **Transparency**

Being transparent in a PPP is important to avoid among other things corruption. Moreover, it helps to avoid a negative public perception. Transparency helps hold both the public and private sectors accountable for their actions and ensures that the project aligns with the public interest. It can also help to enhance stakeholder participation and public trust (Chou and Pramudawardhani, 2015; Osei-Kyei and Chan, 2015).

#### **Public support**

Social support enhances the credibility of a PPP (Chou and Pramudawardhani, 2015; Osei-Kyei and Chan, 2015; Vlaams Kenniscentrum PPS et al., 2014). Since PPPs often involve projects that directly impact society, it is important to have social support and seek collaboration with the public. This way genuine needs and problems are addressed.

#### Formalized co-operation arrangement

Clear and well-defined contract documents help prevent misunderstandings between the public and private partners (Chou and Pramudawardhani, 2015; Osei-Kyei and Chan, 2015). Based on preference the content of a contract can vary in details and formality. Important factors to include seem to be objectives, responsibilities and risk allocation. Besides that it enhances transparency, a clear contract document can enforce the agreement, protecting the rights and interests of the partners involved.

# 2.3. Challenges

This section explores the challenges associated with PPPs, highlighting the potential obstacles and complexities that arise during the implementation and management of such collaborative projects.

#### **Finances**

Financing and affordability can be significant hurdles in PPPs (Xue et al., 2020; Esposito and Dicorato, 2020). The private sector requires a reasonable return on investment, while the public sector must ensure that the project remains affordable and provides value for money. This can lead to high risks and can account for complex situations. These risks stem from the challenge of balancing the financial expectations of private investors with the need to safeguard public interests. This can potentially lead to conflicts over cost allocations, revenue sharing, performance guarantees, and overall project profitability. There are several ways to address these challenges effectively. Examples are proper financial analysis, risk assessment, and long-term financial planning.

#### **Politics**

Political interference and frequent policy changes can disrupt PPP projects. Changes in government priorities, regulations, or policies can impact the projects feasibility, financial viability, or risk allocation (Osei-Kyei and Chan, 2017; Pierre and Peters, 2000). Another reason can be that unexpected external costs come to the surface and might awaken the union of specific interest groups. This is because projects progress gradually, beginning with the establishment of sound engineering and economic foundations. Subsequently, the focus shifts to determining the financial and legal feasibility, followed by the necessary political support to incorporate private-sector involvement. The introduction of private-sector participation usually brings about new governance regulations within a sector, often revealing previously concealed costs or processes that were not previously accounted for (Marques de Sá, 2017).

#### Context

Just like governance, how to organise a PPP is not a question that can be answered in general. For every project, a tailor-made answer is needed due to the complexity and uniqueness of PPP projects (Bult-Spiering and DeWulf, 2006). Each PPP project varies in terms of scope, size, sector, and objectives. Factors such as the nature of the infrastructure or service being developed, the level of private sector involvement required, stakeholder involvement, legal frameworks, the risks involved, and the financial arrangements differ from project to project. These specific considerations necessitate a tailored approach to organsing the PPP.

#### **Differing interests**

The decision-making processes in PPPs involve multiple stakeholders. These stakeholders may have different perspectives, priorities, and decision-making frameworks. For example, the contrasting perspectives on risk between the public and private parties are one of the reasons PPPs often fail to find the right level of private-sector participation (Beckers and Stegemann, 2001). Reconciling these varied interests and reaching consensus on crucial matters, such as project design, financing arrangements, and operational strategies, can be complex and time-consuming. A sufficient overlap in interests of the different parties can help with strategic considerations and mutual focus (Rafi and Maddedu, 2010). In situations where conflicts of interests are not properly identified and managed, they can seriously compromise the integrity of organisations and lead to corruption in both the public and private sectors (Rooijendijk, 2018). Besides that, due to the potentially different interests of the parties involved, the innovation process can be delayed considerably (Omta et al., 2004).

# 3. Practical study Amsterdam Life Sciences District

#### 3.1. Role and interests main stakeholders

#### **Public party: Municipality of Amsterdam**

The municipality is committed to fostering a vibrant ecosystem that thrives on innovation, economic growth, and community well-being. With a focus on creating a connected and inclusive environment, the municipality aims to ensure a balanced mix of residential properties, businesses, public spaces, and essential facilities. Besides that, the municipality aims to enhance the accessibility and integration of the ALSD with surrounding areas. As outlined in the Strategy Innovation District document, the municipality seeks to accomplish specific action points, while attracting new businesses to Amsterdam.

The municipality plays a facilitating role in driving Amsterdam's development, but also acknowledges its limited steering ability. Rather than imposing rigid control, the municipality acts as an enabler, providing support, resources, and guidance to initiatives aligned with its goals.

#### Semi-public party: AUMC

The AUMC places a strong emphasis on the distribution of knowledge. Through collaboration with academic institutions, healthcare professionals, and industry partners, the hospital aims to share expertise, research findings, and best practices to enhance healthcare outcomes. Their three pillars are healthcare, education, and research. Besides that, innovation is at the core of the hospitals mission. The AUMC strives to be at the forefront of cutting-edge research, exploring new technologies, treatment methodologies, and medical interventions.

Recognizing the value of industry partnerships, the AUMC provides a supportive environment for companies to collaborate and conduct business on its premises. By encouraging mutually beneficial relationships, the hospital aims to foster innovation and accelerate the translation of research findings into practical applications. However, the hospital's focus is not solely restricted to the ALSD, as it also operates in other locations within the city. The AUMC generally attaches less value if a startup chooses to settle on their premises within the ALSD or at their other location, VUmc.

While the AUMC is driven by a desire to push boundaries and explore new frontiers in healthcare, it operates with caution regarding high financial risks. Due to various constraints, the hospital must consider the financial implications of ventures and initiatives carefully.

#### Private parties: Real estate developers

The real estate developers are driven by the goal of creating neighbourhoods that excel in their functionality, safety, and overall attractiveness. By emphasizing thoughtful urban planning, and the integration of diverse amenities, they aim to shape environments that cater to the needs of residents and businesses alike. This includes considerations for residential spaces, commercial areas, green spaces, and other essential components that contribute to a well-rounded community.

Recognizing the importance of collaboration, they aim to establish long-term collaborative partnerships. By working hand-in-hand with key stakeholders, like the AUMC and the municipality of Amsterdam, the real estate developers aim for a more shared vision on development.

While striving for efficient processes, the real estate developers also have to adhere to the necessary regulations for life sciences specialised properties, ensuring compliance with the requirements.

# 3.2. Perspectives on collaboration

#### **Public perspective**

The ALSD fosters a strong sense of community and collaboration among businesses within the area. Companies in the ALSD are adept at finding each other, and entities like AHTI play a significant role in facilitating connections and knowledge exchange. Recognizing each other's presence is a crucial factor in fostering cohesion among businesses. Establishing a governance structure could help emphasize the social aspect and ensure that initiatives such as providing internship opportunities or organising events receive due attention. It is challenging for individual parties to undertake such efforts on their own, and it would be unreasonable to expect them to prioritize such activities. Collaboratively working towards these objectives can prove advantageous for all parties involved.

Effective project management is necessary to bring the ALSD community together and determine the lead role. This leadership role could rotate among different entities. Additionally, clear work agreements should be established to define the representation of the area and ensure effective coordination.

Lastly, it is believed that one of the key prerequisites for creating innovation is synergy. When parties come together and start working together, it has a multiplying effect on knowledge production. In addition, interaction is very important, which arises faster when parties work together.

Overall, the public perspective views itself as playing a facilitating role within the area. They recognize the need for collaboration, coordination, and the establishment of a supportive ecosystem to maximize the benefits and synergies among the businesses within the ALSD.

#### Semi-public perspective

The semi-public perspective acknowledges that while there is some level of contact, there is a lack of "true" collaboration within the ALSD. It is evident that entities within the ALSD can function quite well independently, and there are already instances of close collaboration. However, there is a clear recognition that if the goal is to truly promote and elevate the ALSD, stronger collaboration is necessary.

While there is an ability to find common ground on substantive matters, once a party expresses interest in seeking space, competition between stakeholders arises. This competitive dynamic is likely to persist to some extent, as businesses within the ALSD are also competitors to one another.

There is a belief that there is much more potential for joint efforts in terms of promotion, website development, and overall brand awareness. Aligning goals, discussing ongoing activities, and staying informed about each other's progress are seen as important aspects. However, when it comes to customer acquisition, the synergy among stakeholders seems to diminish.

Overall, the semi-public perspective highlights the need for enhanced collaboration within the ALSD, particularly in areas such as promotion, website development, and brand exposure. While stakeholders can find common ground and align on substantive matters, the competitive nature of seeking tenants and customers presents challenges. Nevertheless, there is a recognition of the potential for joint efforts and the benefits that can be achieved by working together more closely.

#### Private perspective

The private parties acknowledge the success of the collaboration with owners in the BIZ and recognize the need for a similar collective platform within the ALSD. Currently, there is no formal body for collective decision-making for the ALSD, which the private sector believes is essential. Embracing diversity among different areas within the ALSD is seen as advantageous, allowing for various levels of users. This vision is viewed as an opportunity for co-creation with public entities.

The Meibergdreef is currently perceived as a spatial constraint by real estate developers. Bridging the gap across the Meibergdreef is a focal point for the private sector, with the belief that the municipality should take the lead as the common factor.

Overall, the private perspective emphasizes the need for an overarching collaboration platform within the ALSD and recognizes the importance of the municipality taking the lead in facilitating cooperation. Furthermore, there is a desire for more assertive decision-making and the implementation of additional elements, such as improved signage, to enhance the ALSD stature and identity.

# 3.3. Summary interests, goals, and view on collaboration stakeholders

In table 1 an overview can be found from the findings in section 3.1 and 3.2.

Party	Interests	Goals	View on collaboration
Municipality of Amsterdam	<ul> <li>Vibrant ecosystem with a focus on innovation.</li> <li>Economic growth and job creation.</li> <li>Connection ALSD with surrounding areas.</li> <li>Community well-being.</li> <li>Ensuring a good mix of residential property, businesses, public spaces and other essential facilities.</li> </ul>	<ul> <li>Accomplish the realisation of the action points in the Strategy Innovation District document.</li> <li>Attract new businesses to Amsterdam.</li> </ul>	<ul> <li>A strong sense of community and collaboration among businesses is visible.</li> <li>An overarching organisation could emphasize the social aspect in the area and ensure initiatives like events and internship opportunities.</li> </ul>
AUMC	<ul> <li>Knowledge distribution.</li> <li>Innovation in healthcare research.</li> <li>Freedom to do business with companies on their own premises.</li> </ul>	Focus on healthcare, education and research and combine these components.	<ul> <li>Lack of 'true'         collaboration. Stronger         collaboration is needed         to promote and elevate         the ALSD.</li> <li>Competitive dynamics         between businesses can         hinder synergy.</li> <li>Potential for joint efforts         in areas such as         promotion, website         development and brand         awareness.</li> </ul>
Real estate developers	<ul> <li>Create the best possible neighbourhood that is multifunctional, safe and becomes an attractive working and living environment.</li> <li>Build long-term relationships with stakeholders.</li> <li>Shorter/more efficient processes for developments.</li> </ul>	<ul> <li>Enhance attractiveness ALSD.</li> <li>Work more closely with key stakeholders like the AUMC and the municipality of Amsterdam.</li> </ul>	<ul> <li>Recognition for a similar platform as the BIZ Paasheuvelweggebied within the ALSD.</li> <li>A formal body for collective decisionmaking is missing.</li> <li>Spatial constraints need to be removed to bring the ALSD to a whole.</li> </ul>

Table 1: Summary of the interests, goals and view on collaboration from main stakeholders

# 3.4. Comparison

The collaboration dynamics in the ALSD align with some of the findings on successful factors and challenges mentioned in the literature study in section 2, while also presenting unique aspects specific to the ALSD context.

The parties within the ALSD acknowledge the value of collaboration and share common objectives, which aligns with the literature's emphasis on the importance of having clear and mutual goals in successful PPPs. Mutual goals help align expectations, establish a common understanding of what needs to be achieved, and serve as a benchmark for assessing progress and performance.

Social support from the public is recognised as a significant factor in enhancing the credibility of the collaboration in the ALSD. This is consistent with the literature, which emphasizes the importance of seeking collaboration with the public in PPPs, especially when projects have a direct impact on society.

The call for formalised structures and platforms to promote collaboration in the ALSD aligns with the literature, which emphasizes the significance of well-defined contract documents in successful PPPs. A clear contract can prevent misunderstandings between public and private partners, enforce agreements, and protect the rights and interests of the involved parties.

On the other hand, the presence of competition among stakeholders in the ALSD poses a challenge to seamless collaboration, similar to what is identified in the literature. Besides that, the need for clearer coordination and decision-making processes in the ALSD reflects a challenge also highlighted in the literature. Complex decision-making frameworks and differing perspectives among multiple stakeholders can hinder progress and collaboration.

Regarding the way of collaboration, several approaches have come forward. The following approaches have been identified:

- 1. Collaborating solely on content (knowledge distribution/expertise): One approach is to focus on exchanging expertise and knowledge among the partners involved. This approach aligns with the literature's emphasis on mutual goals and knowledge sharing in successful collaborations.
- 2. Collaborating on promotion and brand awareness: Partners can work together to promote and enhance the visibility of the area, establishing a collective brand identity. While enhancing the visibility of the area through collaborative promotion is an essential aspect in the practical study, it is not explicitly mentioned in the literature's successful factors. However, promoting the area and creating a collective brand identity can contribute to building public support, transparency, and accountability.
- 3. Ensuring spatial coherence: Collaborative efforts can be directed towards ensuring that the area forms a cohesive and well-planned spatial unit, with coordinated development and design. Compared with findings from the literature mutual goals and well-defined contract documents seem to be important factors in the success of this point.
- 4. Organising joint activities: While some joint activities have taken place in the past, the website indicates that the most recent published event was more than two years ago. There is potential for partners to collaborate on organising regular activities and events to foster engagement and networking. While the literature emphasizes the importance of joint efforts and transparency, the specific idea of organising joint activities is not explicitly mentioned.
- 5. Collaborative decision-making on business locations: Partners can collectively influence and guide the strategic placement of businesses within the area, aligning with shared objectives and goals. This is discussed in the practical study but does not come forward in the literature study.
- 6. Establishing contractual agreements on shared goals and responsibilities: The suggestion to

- formalize collaboration through contractual agreements aligns with the literature. Partners can formalize their collaboration by setting clear contractual agreements regarding common objectives, roles, and responsibilities.
- 7. Having a central point of contact: The question remains as to who would be best suited to serve as the central point of contact. Ideally, an independent party would be preferable to regulate and facilitate collaboration among the various stakeholders. Having an independent party to regulate and facilitate collaboration aligns with the literature's emphasis on transparency and accountability.

From the interview also a few other challenges came forward. The challenge of strategically managing the sequence of startups' growth, starting from research initiatives at AUMC and progressing to other locations like AHTC and MBP, is specific to the ALSD context. In addition, the practice of offering exploration options in other innovation districts across Amsterdam to potential new tenants is a specific challenge for the ALSD. While this approach aims to search with a tenant for the most suitable location, it may pose challenges for some real estate owners who prefer exclusive offerings of their properties.

In summary, the collaboration dynamics in the ALSD align with some of the successful factors and challenges identified in the literature on PPPs. The recognition of mutual goals and seeking public support are positive aspects that align with successful factors. However, the presence of differing interests, the need for clearer coordination, and the unique challenges of strategic location management and tenant exploration options present areas for improvement.

Furthermore, the practical study reveals that the view on collaboration aligns with some findings from the literature on successful collaborations. Elements such as knowledge distribution, spatial coherence, and the establishment of contractual agreements are in line with the literature. However, there are elements that do not come forward in the literature study such as collaborative promotion and brand awareness, organising joint activities, collaborative decision-making on business locations, and having a central point of contact. These differences emphasize the challenge from the literature that each innovation district has a unique context that leads to different challenges and essential factors.

# 4. Discussion

## 4.1. Comparison literature versus practice

In practice, there is currently no established shared goal among the parties in the ALSD, although some perspectives align and certain interests complement each other. While the Strategy Innovation District document represents a step towards establishing shared goals, not all parties are actively implementing it. The lack of clear, jointly undertaken actions prevents the effective measurement of performance and progress, making it less transparent for all parties involved. Currently, you observe that private entities feel that, apart from the mention of goals, nothing substantial has happened.

In the literature, "risk sharing and mitigation of financial risks" is frequently cited as an important aspect of successful collaboration. However, in practice, this aspect has not yet materialised in the ALSD. It appears that the parties need to align their goals before they can effectively address risk sharing. The reasons for the lack of progress in working together and setting goals can vary. The parties have different interests, visions, and risk perceptions. Additionally, the absence of a coordinating factor in the area contributes to the current situation. While the importance of collaboration is recognised, the existing functionality of the area might reduce the urgency to take action.

Factors from the literature that could facilitate progress include the establishment of a formal agreement, tailored to the preferences of the parties involved. This agreement would clarify responsibilities, goals, and risk allocation, ensuring transparency and minimizing future disagreements. However, the actual need for such an agreement remains uncertain based on the practical study.

Finances are a recurring theme when it comes to entering into a collaboration. Varying perspectives on risk-taking in terms of finances exist, with the hospital being financially cautious compared to the private parties. Advice from the literature suggests utilizing the expertise and financial resources of the private sector through PPPs to address challenges in strategic management, real estate occupancy, and attracting suitable tenants. Political factors, while not prominently observed in the practical study, can also present obstacles to collaboration.

While the ALSD already demonstrates some of the benefits in section 2.1, such as the sharing of advanced technological expertise and some synergistic results, there is still room for improvement in areas like risk sharing, more effective and efficient projects, and faster progress. Overcoming the obstacles and addressing factors advised by the literature can lead to successful collaboration and the realisation of these benefits in practice.

#### 4.2. Context

The establishment of a successful synergistic PPP is influenced by various contextual factors that shape the interests and objectives of involved parties. In an innovation district like the ALSD, the focus on healthcare research and entrepreneurship leads to differing goals among academic institutions, private entities, and the public sector. Local governance structures, policies, and legal frameworks also impact PPP feasibility and implementation. Political dynamics, stakeholder relationships, and support from local authorities influence trust, collaboration, and decision-making within the partnership.

Moreover, economic conditions and market characteristics specific to the ALSD context affect funding availability, risk perceptions, and financial models. Balancing public and private sector interests is essential. Additionally, cultural and social factors influence collaboration dynamics and stakeholder engagement. Understanding and respecting these context-specific factors are crucial for effective communication and meaningful engagement among diverse stakeholders.

# 4.3. Level of steering

An open question revolves around whether the focus should be specifically on the district or take a broader view considering the entire city of Amsterdam. The name "Amsterdam" itself carries a strong appeal, and international companies may not always distinguish between the different districts within the city. Public and semi-public parties, which are involved in multiple areas across the city, may have less incentive to concentrate solely on a single district. Consequently, the choice of location often lies with the companies themselves, based on where they feel most comfortable and supported, rather than being actively guided by a centralised approach. In contrast, private parties within the ALSD have a vested interest in attracting and retaining companies within the district to enhance its specialisation and collaborative potential.

# 4.4. Life sciences specialisation

Another point for discussion is the determination of the extent of specialisation in the life sciences sector within the ALSD. On one hand, stakeholders desire a certain level of freedom to explore diverse areas within the field. On the other hand, there is a recognition that specialisation can enhance collaboration and foster a thriving ecosystem. One notable challenge raised is the presence of specific building requirements that define a fully-fledged life sciences building, posing difficulties for real estate developers in meeting these criteria.

# 4.5. Performance measurement synergistic PPP

Measuring the actual synergistic outcomes and quantifying the added value of the PPP in the ALSD pose challenges. The evaluation of collaboration outcomes and the determination of added value is subjective and context-specific. This complexity arises from the diverse goals, perspectives, and metrics used by different stakeholders. It highlights the need for tailored approaches and a nuanced understanding of the specific context of the ALSD when assessing the success and impact of the partnership.

# 5. Conclusion

The ALSD represents a dynamic and collaborative ecosystem that brings together stakeholders with diverse interests and objectives. The main stakeholders in the ALSD include the municipality of Amsterdam, the AUMC and real estate developers. These stakeholders have various interests and objectives, which revolve around fostering innovation, economic growth, community well-being, and collaboration among different parties to create a thriving and vibrant life sciences ecosystem in the district.

The municipality of Amsterdam acts as an enabler, providing support and guidance to initiatives aligned with its objectives, including economic growth, job creation, community well-being, and attracting new businesses to the area. Additionally, the municipality exercises decision-making power and regulatory control over the district's physical development and infrastructure.

The AUMC, as a major knowledge hub, focuses on knowledge distribution and innovation in healthcare research. They play a central role in the ALSD, attracting researchers and seamlessly integrating healthcare, education and research. While driven by a desire to explore new frontiers in healthcare, the AUMC operates with caution regarding financial risks.

Real estate developers are instrumental in shaping the ALSD's physical landscape, striving to create an attractive and multifunctional neighbourhood that fosters a conducive working and living environment. Their objectives include building long-term relationships with stakeholders and streamlining development processes for increased efficiency. To facilitate more effective collaboration, the BIZ in Paasheuvelweggebied serves as a unified communication channel between real estate developers and the municipality. This enables effective coordination and ensures a shared vision of development within the Paasheuvelweggebied.

The main stakeholders within the ALSD face several challenges regarding collaboration. One of the prominent challenges is differing interests among stakeholders, which hinders seamless collaboration within the district, aligning with findings in the literature. The need for clearer coordination and decision-making processes also poses a challenge, reflecting complexities in navigating differing perspectives among multiple stakeholders.

In addition to the challenges identified in the literature, the ALSD context presents specific hurdles. The logical sequence for a startup within the ALSD starts with research initiatives at the AUMC. As projects grow beyond the capacity of the AUMC, they can transition to the Paasheuvelweggebied, for example to the AHTC. Subsequently, there is the possibility to move towards the MBP. A challenge lies in how to strategically manage this sequence.

Besides that, it is noted that there is no consensus regarding the approach to offering exploration options to potential new tenants. Some stakeholders advocate for providing options in other innovation districts across Amsterdam, seeking to find the most suitable location for the tenant. However, this conflicts with some private parties that would like the ALSD to be an exclusive district for life sciences.

The collaboration in the ALSD faces challenges due to the absence of a mutual goal and clear, jointly undertaken actions. Differences in interests, visions, and risk perceptions among the parties hinder progress. The lack of a coordinating factor and financial considerations further contribute to the existing challenges. However, there are some observed benefits and synergistic results in certain areas. For example, in sharing expertise and knowledge distribution. Besides that, it is noticed that the level at which steering should take place in the ALSD requires consideration.

Another obstacle between the public and private sectors in the ALSD includes risk allocation. There is a need for clearer contractual agreements or documented responsibilities. Financial difficulties and lengthy processes hinder progress, and the alignment of stakeholders' interests and the specialisation in life sciences also seems crucial.

Besides the level of steering, it is also unclear from the practical study which kind of collaboration would be desired as many different forms are mentioned. The private sector may have less interest than the public sector in some aspects. These are likely collaborating solely on content, organising joint activities and making collaborative decisions on business locations. Nevertheless, the practical study indicated that private entities are willing to contribute ideas but often feel unheard or perceive a lack of genuine interest in collaboration from the public sector. This is primarily due to the high financial risks involved.

It can be concluded that the formation and effective operation of a synergistic public-private partnership in the ALSD is currently hindered and limited by the absence of overlapping interests among stakeholders. However, there is a consensus on the value of collaboration and the need for a platform that promotes joint efforts. By addressing the challenges and working towards aligning interests, establishing clearer agreements, and fostering a more inclusive and supportive collaborative environment, the potential for a synergistic public-private partnership in the ALSD can be enhanced.

## 6. Recommendations

In this chapter future research directions for the ALSD are proposed to address key areas that require further investigation and exploration.

#### 6.1. Recommendations for the Amsterdam Life Sciences District

To enhance collaboration in the ALSD and promote a synergistic public-private partnership, the following recommendations are proposed:

- 1. Establish a mutual goal and document agreements: It is crucial to establish a shared goal among the parties involved. This can be achieved through the establishment of a formal agreement that clarifies responsibilities, expectations, goals, and risk allocation. By having a common objective, all stakeholders can work towards a unified vision and foster a more effective collaborative environment.
- Address regulatory obstacles and financial difficulties: Work towards streamlining regulatory processes and providing financial support to alleviate frustrations and facilitate development. This will require close cooperation between the public and private sectors to identify and overcome these obstacles.
- 3. Gradually build intensive collaboration: This approach involves starting with smaller, less complex collaborative projects or initiatives that allow the parties involved to get to know each other, build trust, and align their interests. As mutual understanding grows, the collaboration can expand to encompass a shared vision and mutual goals. This approach should pave the way for more effective and beneficial collaboration.
- 4. Strengthen the specialization in Life Sciences: Foster the growth and specialization of the ALSD in the Life Sciences sector. By offering distinct offerings and attracting relevant stakeholders, the interests of key stakeholders can be aligned, creating value for both the public and private sectors.
- 5. Establish mechanisms for evaluating success and impact: Develop metrics and evaluation methods to measure the outcomes and added value of the collaboration. This will provide valuable insights and allow for continuous improvement of the partnership.

By implementing these recommendations, the collaboration between the public and private sectors in the ALSD can overcome challenges, foster synergy, and achieve a more effective and mutually beneficial partnership. It is important to note that these recommendations require time, effort, and genuine commitment from all parties involved to drive positive change and realize the full potential of the ALSD.

#### 6.2. Recommendations for future research

Further research is among other things needed to address the question of how strategies or mechanisms can be implemented to bridge divergent interests and foster alignment among stakeholders. It should focus on enhancing collaboration within the area by exploring various aspects. Firstly, there is a need to delve into the development of overarching cooperation and determine the most effective way to organise it. This involves considering whether one party should take the lead or if a rotating system would be more suitable. Additionally, the independence of the coordinating party and the specific stakeholders involved should be investigated to establish a clear structure for collaboration.

Another important area for future research is the focus of collaborative agreements. It is crucial to understand the content of these agreements and identify the specific areas of cooperation they should cover. This will help align the partnerships with the goals and interests of the stakeholders and ensure that the collaboration is targeted and purposeful.

An idealistic yet valuable research direction is exploring the possibility of jointly identifying the optimal business locations within the ALSD. This would require extensive planning and coordination among the parties involved. Investigating the feasibility and potential benefits of such an approach will provide insights into how collaboration can be leveraged to maximize the area's potential and create a thriving ecosystem.

The level of steering within the ALSD is another aspect that warrants research attention. Determining whether a more city-wide approach or a specific focus on the ALSD is more effective in achieving the desired outcomes will inform decision-making and governance structures. Understanding the advantages and challenges of each approach will contribute to the development of a robust and efficient collaborative framework.

Drawing lessons from similar innovation districts and public-private partnerships in the practical field can also be valuable for the ALSD. Lessons can be drawn out of challenges they encountered, perceived essential factors for success, established agreements and the organisational structure. Research should explore successful case studies and best practices to identify strategies and approaches that can be adapted to the ALSD's unique context. This comparative analysis will provide insights into how the ALSD can enhance its performance and achieve its goals more effectively.

Furthermore, research should examine the connection between the MBP and Paasheuvelweggebied. Especially from a private perspective, this still seems to be an obstacle. Investigating the obstacles and challenges that hinder collaboration and cohesion between these areas will help develop strategies to bridge the gap and foster a more integrated and synergistic environment.

By addressing these research recommendations, a more comprehensive understanding of the potential of a governance structure for the ALSD is gained. This knowledge will contribute to the continuous improvement of the area and inform the development of effective strategies and policies for future collaborations.

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# **Appendix A: Interviews**

Appendix is not included in this version due to confidentiality.

# **Appendix B: Interview questions**

De vragen in deze appendix zijn opgesteld ter voorbereiding van de interviews. De interviews zijn semigestructureerd afgenomen, dus de vragen in de daadwerkelijke interviews kunnen afwijken van de vragenlijst.

- Op basis van de website van het ALSD ziet het eruit dat er een zogeheten PPS is, kunnen jullie iets vertellen over hoe die samenwerking ontstaan is?
  - Waren er specifieke strategieën/benaderingen die werden gebruikt om gemeenschappelijke grond te vinden met andere instanties?
  - Bij PPS kan er spraken zijn van tegengestelde belangen, hoe zijn jullie hiermee omgegaan?
  - Waren er specifieke juridische of regelgevende kwesties die moesten worden aangepakt bij het opzetten van publiek-privaat samenwerkingen?
  - In literatuur gaat het vaak over hoge risicos bij het aangaan van samenwerkingen, hebben jullie dat ook zo ervaren?
- Wat zijn enkele andere uitdagingen bij het opzetten van publiek-privaat samenwerkingen?
  - Hoe kunnen deze uitdagingen worden overwonnen?
- Met welke partijen/bedrijven werken jullie het meest nauw samen in het ALSD?
- Hoe ziet de huidige samenwerking met verschillende partijen in het ALSD eruit?
  - Hoe zijn de rollen/verantwoordelijkheden verdeeld?
  - Hoe wordt het financiële aspect beheerd?
  - Hoe wordt ervoor gezorgd dat gezamenlijke doelen gewaarborgd blijven?
- · Hoe ziet in jullie ogen de ideale publiek-privaat samenwerking eruit?
  - Wat maakt een samenwerking succesvol?
  - Welke factoren zijn het belangrijkst in een samenwerking?
  - Hoe worden de belangen van de publieke, private en academische sector geïntegreerd?
- Zijn er specifieke gebieden waarin de private sector bijzonder waardevol is voor het aanvullen van de capaciteiten van de publieke sector en vice versa? Op welk vlak vullen ze elkaar goed aan en op welk vlak juist niet?
  - Hoe kunnen publieke partijen ingezet worden om meer privaat bij te sturen?
- Zien jullie ontwikkelingen/veranderingen op het gebied van publiek-privaat samenwerken?
- Hebben jullie eerder gewerkt met PPS structuren in een ander gebied?
  - Wat waren daar voornamelijk de succesfactoren en uitdagingen?
  - Kan het ALSD hier van leren?
- We hebben het nu over de PPS gehad, nu kan synergie ontstaan bij een PPS, denken jullie dat dit het geval al is in het ALSD? Of dat dit nog niet zo is?
  - Welke factoren zijn volgens jullie belangrijk voor het creëren van synergie?
- · Nu is het een actiepunt dat er een overkoepelende sturing moet komen voor het ALSD, vinden

jullie dat het ALSD daarin al goed op weg is? Of dat er nog een lange weg te gaan is?

- · Zo niet, wat denken jullie dat de achterliggende reden is?
- ALSD is bestempeld tot innovatiedistrict, zien jullie veranderingen sinds dat het ALSD tot innovatiedistrict is benoemd in vergelijking tot daarvoor?
  - Welke elementen zijn essentieel voor het succes van een innovatiedistrict? (in literatuur kwam ik tegen dat innovatie pas echt bereikt kan worden als er synergie is tussen de partijen, hoe zien jullie dat?)
  - Wat is een gewenste mix van de verschillende netwerk assets?
  - Hoe zien jullie de rol van de gevestigde bedrijven bij het helpen van startups in het gebied?
  - Hoe kijken jullie tegen de samenhang tussen het Paasheuvelweggebied en het MBP aan?
- · Hoe zien jullie de rol van in het ALSD?
- · Wat is jullie toekomstvisie voor het ALSD?
  - Hoe denken jullie dat de samenwerkingsverbanden in het gebied zich zullen ontwikkelen?
  - Waar zit de grootste uitdaging voor het district?