

Innovation Partnership - A Way for more sustainable Innovations within Public Procurement?

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"Master of Science"

supervised by
Dipl. Ing. Dr. Klaus Rapp

Tabea Reicher, BSc

009040184

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Affidavit

I, **TABEA REICHER**, hereby declare

1. that I am the sole author of the present Master's Thesis, "INNOVATION PARTNERSHIP - A WAY FOR MORE SUSTAINABLE INNOVATIONS WITHIN PUBLIC PROCUREMENT?", 55 pages, bound, and that I have not used any source or tool other than those referenced or any other illicit aid or tool, and
2. that I have not prior to this date submitted this Master's Thesis as an examination paper in any form in Austria or abroad.

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Signature

Abstract

In January 2014 the European Parliament updated the EU rules on public procurement: Inter alia, the Innovation Partnership as a demand side mechanism should foster environmental and social considerations and innovation when public contracts are awarded. If the public sector expresses a need for goods, services or works that cannot be met by current solutions available on the market, the innovation partnership aims to be a simpler approach for suppliers to react to tender invitations. Hence, in the best case scenario, a successful innovation partnership may stipulate the market towards environmentally friendly products and services or may raise at least awareness of the possibility of innovative procurement processes within the public sector.

Contracting authorities are allowed to cooperate with one or multiple partners to research and develop an innovative outcome. This leaves room for suppliers to come up with an innovation in cooperation with the authority. In simplified terms, innovation partnership can be understood as a restricted procedure followed by a contract with a R&D-part and the supply within one contract: Firstly, the market parties go through a number of predetermined R&D phases, followed secondly by the procurement of the whole or partly innovation developed.

Key words: Promoting Public Procurement of Innovation, Innovation Partnership, Innovation & Sustainability, international Good Practices

Table of content

Abstract.....	ii
Table of content	iii
Abbreviations	v
1. Introduction	1
1.1 Motivation.....	1
1.2 Topic.....	2
1.3 Objective.....	3
1.3.1 Design.....	3
1.3.2 Research Question	4
1.3.3 Research Limitations.....	4
1.4 Background Information	4
2. Definition	7
2.1 Innovation	7
2.2 Sustainability & Green Procurement.....	8
2.3 Public Procurement & Tendering.....	9
3. Institutional & legal framework.....	10
3.1 European Union regulation.....	11
3.2 Austrian Law	13
3.3 Rules and Procedure	14
3.3.1 Restricted and negotiated procedure.....	15
3.3.2 Pre-commercial Procurement (PCP).....	16
3.3.3 Competitive Dialogue	17
4. Most important legal provisions of Innovation Partnership	18
4.1 EU Directive 2014/24/EU	19
4.1.1 What is an Innovation Partnership?.....	19
4.1.2 In what cases is the Innovation Partnership applicable?.....	19
4.1.3 What does a tender procedure look like?	20
4.1.4 What does a potential contract look like?	22

4.2	Federal Tendering Act 2017	22
4.2.1	What is an Innovation Partnership?	23
4.2.2	In what cases is the Innovation Partnership applicable?	23
4.2.3	What does a tender procedure look like?	24
4.2.4	What does a potential contract look like?	25
4.3	Procedure of an innovation partnership	26
4.3.1	Phase 1 – negotiation procedure	27
4.3.2	Phase 2 – cooperation in the award contract	28
4.4	Summary of an innovation partnership	28
5.	International Good Practices	32
5.1	Innovation Partnership in Germany “Land sucht innovative Fahrzeuge (2016/S 151-272954)”	32
5.1.1	Objective of the project	32
5.1.2	Definition Low emission vehicle	33
5.1.3	CO ₂ emission reduction	34
5.1.4	Process	37
5.1.5	Experiences and Strategy Approaches	38
5.2	iHELP in the UK (West Lancashire Clinical Commissioning Group)	39
5.2.1	Objective of the project	40
5.2.2	Definition	43
5.2.3	Process	43
5.2.4	Experiences and Strategy Approaches	44
6.	Conclusion & Recommendations	46
	References	50
	List of tables	54
	List of figures	55
	Appendices	A

Abbreviations

BBG – Bundesbeschaffung GmbH (Federal Procurement Agency)
BMLFUW – Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft (Federal Ministry of Agriculture, Forestry, Environment and Water Management)
BRICS – Brazil, Russia, India, China, South Africa
BVergG – Bundesvergabegesetz
CCG – West Lancashire Clinical Commissioning Group
CER – Community of European Railway and Infrastructure Companies
CH₄ – methane
CO₂ – carbon dioxide
EU – European Union
EC – European Commission
FFG – Forschungsförderungsgesellschaft (Austrian Research Promotion Agency)
GDP – Gross Domestic Product
GPP – Green Public Procurement
IÖB – Innovationsfördernde Öffentliche Beschaffung
NAH.SH – Nahverkehrsverbund Schleswig-Holstein GmbH
NHS – NHS Midlands and Lancashire Commissioning Support Unit
N₂O – nitrous oxide
NO₂ – nitrogen dioxide
NO_x – nitrogen oxide
OECD – Organisation for Economic Co-operation and Development
PCP – Pre-commercial Procurement
pkm – person kilometre
PM - particulate matter
PPPI – Public Procurement Promoting Innovation
PPQ – Pre-qualification questionnaire
SME – Small and Medium-sized Enterprises
SO₂ – sulphur dioxide
TFEU – Treaty on the Functioning of the European Union
UK – United Kingdom
VAT – Value-Added Tax
VOC – volatile organic compounds

1. Introduction

This first chapter aims to give a deeper insight why the topic was chosen (1.1 Motivation) and further introduces the topic (1.2 Topic and 1.3 Objective) including the central issues and also research limitations.

1.1 Motivation

Austria is known for being an expert in niche markets and exporter of products in the field of technology and innovation. This know-how holds enormous potential for existing but also for future markets worldwide (e.g. emerging markets like the BRICS countries). The time is right to use this immense power not only in the private sector but also in the public sector to provide best services to the citizens and fulfil the state's obligation to protect the environment. But like all sectors also the public sector is confronted with severe concerns like financial pressures due to legal requirements, an aging society with related health issues as well as climate change and migration (Mulgan, 2014). Next to these worldwide trends, main issues bureaucracy has to deal with are obstacles concerning prejudice of lethargy and carelessness on the one side and a lack of competitiveness on the other side.

Currently the author is working for the Federal Procurement Agency Austria in the Department Public Procurement Promoting Innovation (PPPI). There the author realized the gap between the public sector and the private sector but also the tremendous leverage of public procurement. Firstly, by shaping the legal framework, namely how procurement is conducted and secondly, also concerning the political framework, how resources are being used, e.g. by promoting R&D systematically (Eßig, 2013). The Department and the author herself have the vision to build a bridge between these vital stakeholders to create synergies and frame an innovative and sustainable public sector. The interdependence cannot be ignored: One cannot live without the other and there should be more than just co-existence. More than that, one should not underestimate the innovative strength of the public sector to overcome economic and social challenges of our society (Blind et al., 2012, 32). So it is – just to name two out of many examples - forgotten that many innovations like the inventions of the internet and the World Wide Web have their origin within the public sector (Mulgan, 2014).

As the public side is always looking for good solutions in different areas to face these challenges, this need can be seen as a demand-sided mechanism. Over 6,000 federal offices spend an estimated 40 billion Euros per year on public procurement in Austria (public spending, e.g. social welfare transfers, is not included). This can be seen as an immense lever for shaping production and consumption trends and may lead to a significant demand for more eco-friendly goods which will enlarge the market for environmentally friendly products and services. Obviously, this is also an incentive for companies to develop environmental technologies (Commission of the European Communities, 2008, 3).

So – as already mentioned - it is the author's deepest conviction that the public sector has a responsibility to fulfil several goals in regard with economical, societal and environmental issues: Spending money has to be carried out by the public sector in accordance with the best of its knowledge and belief to provide best products and services. Nevertheless, according to Mulgan (2014), there are several factors which impair the innovative capacity of the public sector like the lack of budgets, teams, processes, capabilities and, of course, the low prestige within public organisations. Another obstacle is that public procurement is highly regulated by law.

In January 2014, the European Parliament updated the EU rules on public procurement: New provisions including the Innovation Partnership were to foster environmental and social considerations and innovation when public contracts are awarded. The aim is that market parties can react to a tender invitation of the public sector expressing its need for goods, services or works that cannot be met by the current options available on the market.

It seems to be clear to the author that the innovation partnership is just a supplementary tool and just one of many other procurement procedures to stipulate the private market to provide more eco-friendly and innovative goods and services.

1.2 Topic

The master thesis is to cover the topic of public procurement and its new tender procedure "Innovation Partnership". The goal is to examine the implementation of the Innovation Partnership in Austria and other explicitly chosen EU-member states like Germany and the United Kingdom to see if the tender procedure can lead to more sustainable innovations within the public sector. Further, lessons learned should be

derived from their experiences to provide Austrian procurers with essential information concerning the process in general, potential threats and risks as well as experiences and recommendations.

1.3 Objective

This chapter introduces the reader in the topic of public procurement as a guideline how to read this master thesis. Background information will be given to get a fuller picture and also the research question and limitation will be given.

1.3.1 Design

First, a literature research will be conducted to define the most important phrases like “innovation”, “sustainability”, “tendering” and “public procurement”. Further, to achieve the best result for the legal aspect, the English version of the European directive and the Austrian draft of the Federal Tendering Act 2017 will be used as primary literature. To get a fuller picture, secondary literature will also be used. A brief overview of other tender procedures available will be given to differentiate between them and the Innovation Partnership. Especially the competitive dialogue will be introduced to see why this procedure used to fail in the past.

Since the Innovation Partnership has – for obvious reasons – not been well examined so far, the approach of expert interviews was chosen. To collect and compare the implementation among EU-members and derive recommendations from their experience with the Innovation Partnership, four expert interviews will be conducted. The interviews will include two conducting organisations:

- one organisation which has successfully finished an Innovation Partnership (NHS),
- one organization where an Innovation Partnerships is still ongoing (NAH.SH)

Those two projects were chosen by the author because of their possible role model for innovative and sustainable procurement projects. In the case of the NHS, the project aims for social sustainability, while the NAH.SH whereas aims for ecological as well as social sustainability. Both cases intend to reach financial sustainability.

Below a list of experts for the planned expert interviews:

- Federal Procurement Agency (BBG) – interview partner 1

- Austrian Research Promotion Agency (FFG) – interview partner 2
- Public Procurement Promoting Innovation (PPPI) – interview partner 3
- Nahverkehrsverbund Schleswig-Holstein GmbH (NAH.SH) - interview partner 4

1.3.2 Research Question

The scope of the domestic legislation shall be examined and the following research question should get covered:

“Is the Innovation Partnership a way for more sustainable innovations in public procurement?”

To answer this question three sub-questions are formed:

- (1) How is the scope of the EU Directive 2014/24/EU applied in the Austrian domestic law?*
- (2) How could the implementation of the EU Directive 2014/24/EU lead to more sustainable innovations within the Austrian public sector?*
- (3) Which lessons learned can be derived from international first experiences?*

1.3.3 Research Limitations

Sectoral contracting entities (“Sektorenauftraggeber”) have to follow specific procedures within the EU, while in Austria they are included in a separate part in the “Bundesvergabegesetz” (BVerG). Therefore, the EU directive 2014/25/EU is outside of the MTH’s scope. Currently the Tendering Act 2017 is available as a government bill and also limited to the classical directive.

Hence, the MTH is limited to the classical directives for public procurers.

1.4 Background Information

Public procurement is essential for government activities to carry out their responsibilities and duties (OECD, 2016a, 5), e.g. building a state school, purchasing

furniture for a public prosecutor's office and contracting cleaning services for a public university (Your Europe, 2016). This includes public institutions, public agencies and state-owned enterprises as well as government departments or local authorities. The process involves the procurement planning and proceeding in steps, e.g. product design, advertising, invitation bid, prequalification, bid evaluation, post-qualification, contract award and contract implementation (OECD, 2007, 19). According to the OECD (2016a, 5), the total volume of government procurement activities are 12-20 % of the GDP worldwide and 29 % of general government expenditures in OECD countries. In the European Union public authorities are major consumers: More than 250,000 public authorities spend around 14% of the GDP on purchasing services, works or supplies, which amounts to 2 trillion Euros per year (European Commission, 2010, 2014x, 2017d). In Austria about 40 billion Euros are spent on procurement per year (IÖB-Servicestelle, 2012, 2). The main sectors for public procurers worldwide are energy, transport, waste management, social protection and provision of health and education services.

All these sectors mentioned above have considerable impacts on the environment. Due to the public sector's significant purchasing power, procuring in a sustainable and innovative way influences the market. Promoting sustainable criteria, consumption and production in the tender procedure can be seen as important contributions and real incentives to develop green technologies and products (EC, 2010, 2). Another benefit could be the boost of competitiveness of European industries by stimulating innovation in eco-technologies, which is a high-growth sector in which Europe is already a world leader (Commission of the European Communities, 2008, 3). Several studies have confirmed that green public procurement (GPP) will affect the whole supply chain and will also stimulate the use of green standards in private procurement (Commission of the European Communities, 2008, 3).

Nevertheless, in 2017 the European Commission (2017d,1) published that around *"55% of procurement procedures still use the lowest price as the only award criterion indicating that public buyers probably do not pay enough attention to quality, sustainability and innovation"*. So the Commission chose the approach of publishing guidelines on the use of innovative, green and social criteria. Buyers will benefit from the exchange of good practices in strategic sectors such as healthcare, IT or construction (Commission of the European Communities, 2008, 3).

Further, transparent, fair and competitive public procurement across the EU is vital for economic growth and the creation of jobs. A professionalization of public procurers is essential for a more efficient, effective, citizen- and business-friendly public administration and can only be reached with a change. Therefore, the EU started to rethink the whole approach: According to the European Commission (2017), the government procurement is a driver for EU2020 policies and should use its power strategically to create a more innovative, greener, and socially-inclusive economy.

Especially measures against fraud and corruption should be focused on, e.g. through improved governance, the simplification of procedures and the usage of electronic tools (EC, 2017a). The overall goal is threefold: It aims to

- (1) ensure efficient public procurement for
- (2) a beneficial value to society, which may lead to
- (3) lower environmental costs.

2. Definition

This chapter aims to give definitions of “innovation”, “sustainability”, “public procurement and tendering”. Further, some background information will be introduced concerning institutional and legal framework of public procurement in the European Union as well as in Austria.

In order to investigate the meaning of innovation in the field of public procurement, it is necessary to define what public procurement is and which institutional and legal environment surrounds it. This, an overview of the basic principles of procurement law and a first screening providing the most important legal provisions and a description of the procedure as laid out in Directive 2014/24/EU and the Austrian Federal Tendering Act 2012 (2016) will be given in Chapter 3.

2.1 Innovation

According to Eßig (2013, 90), innovations are products, services or works which are new to the private market, to a company or to the public sector. This implies that an idea is not enough to be an innovation; subsequently it also has to be used for the first time (Weis, 2012; Marin/Bermejo, 2015) because the term “new” can be seen in a very broad sense. For the European Union “new” means that a product, service or work has not been procured on the procurer’s market before or is new to the internal market, more precisely within the European Union (EC, 2014b).

In Art 2 (22) of the EU Directive 2014/24/EU the term “innovation” is defined. According to the directive, innovation *“is the implementation of a new or significantly improved product, service or process”*. Production, building or construction processes, new marketing methods, or a new organisational method in business practices, workplace organisation or external relations are included but also limited within the directive. The purpose of all these innovations is helping to solve societal challenges or support the Europe 2020 strategy for smart, sustainable and inclusive growth¹.

In common literature many authors tried to categorize the term “innovation” and thereby found several classifications. Table 1 shows the summary of the different types of innovation and their characteristics by Bekkers et al. (2014, 6).

¹ According to the EU directive’s recital 95, it is “of utmost importance to fully exploit the potential of public procurement to achieve the objectives of the Europe 2020 strategy for smart, sustainable and inclusive growth. In this context, it should be recalled that public procurement is crucial to driving innovation, which is of great importance for future growth in Europe.”

Table 1: Categorization of the common types of innovation and their characteristics (author's representation after Bekkers et al., 2014, 6)

Type of innovation	Characteristics of the innovation
process innovation	improves the quality and efficiency of internal and external processes
product or service innovation	is a creation of new public products and services
governance innovation	develops new forms and processes to tackle social issues
conceptual innovation	introduces new concepts, frames or paradigms to reframe specific problems
technology innovation	creates new technologies
organisation and management innovation	provides new structures and techniques
institutional innovation	is a fundamental change in the relationship of organisations, institutions and other actors of the public sector

2.2 Sustainability & Green Procurement

In contrast to “innovation, “sustainability” is not defined in the directive. It is just mentioned two times – once in the recital (74) and one time in Article 76 “Principles of awarding contracts”: “[...] *the choice of the service provider shall be made on the basis of the tender presenting the best price-quality ratio, taking into account quality and sustainability criteria for social services.*” However, how the sustainability criteria should be defined is not mentioned.

According to the Austrian Action Plan for Sustainable Procurement of the year 2008 (BMFLUW, 2011, 5), sustainable procurement

- is *“the procurement of environmentally friendly products and services;*
- *[...] is economical, efficient and appropriate;*
- *[...] is the procurement of products and services that satisfy social standards in their production or delivery;*
- *takes into account additional principles of sustainability such as regionality and innovation and strengthens regional economic cycles.”*

Hence, sustainable procurement is the procurement *“of eco-friendly products and services, following the principles of economy, cost effectiveness and expediency and maintaining social standards in their production”* (BMFLUW, 2011, 8, translated by the author). The best case scenario of sustainable procurement is the improvement of all three dimensions of sustainability (environment, social affairs and economy). Is it not

possible to achieve all three dimensions at the same time, at least one dimension should be better off while no deterioration of the other two may occur (BMFLUW, 2011, 8). Therefore, the whole life cycle has to be taken into account to reach the lowest possible environmental damage occurring due to non-renewable resources and greenhouse gases (BMFLUW, 2011, 9).

The European Commission calls sustainable procurement “Green Public Procurement (GPP)”. It is defined under the COM (2008) 400 paper “Public procurement for a better environment”. There it is stated as the procurement of a good, service or work “*with a reduced environmental impact throughout its life cycle²*” instead of the procurement of a good, service or work with the same functionality (EC, 2010, 2 after EC, 2008, 4). As it is based on the life cycle, the European Commission is convinced that it will have an impact on the whole supply chain (EC, 2008, 2). To ensure the best outcome of the framework, the different sectors are covered by two types of criteria: The core criteria and the comprehensive criteria. The core criteria allow an easy application of GPP by addressing the key environmental impacts with a minimum of administrative costs. On the other hand, the comprehensive criteria take more aspects into account to purchase the best environmental products available on the market even though a slight increase in costs may occur (EC, 2008, 6).

2.3 Public Procurement & Tendering

In common literature government procurement or public procurement is defined as the government activity of purchasing goods, services and work on behalf of a public authority. The purchased goods and services cannot be produced internally, but are necessary for the organisation to fulfil its task (Eßig, 2008). Public Procurement is not to be confused with public spending, which also includes social welfare transfers. The directive (2014, 1) says about procurement: “*The Union rules on public procurement are not intended to cover all forms of disbursement of public funds, but only those aimed at the acquisition of works, supplies or services for consideration by means of a public contract. It should be clarified that such acquisitions of works, supplies or services should be subject to this Directive whether they are implemented through purchase, leasing or other contractual forms.*”

² Life cycle costs should cover the purchase price and associated costs (delivery, installation, commissioning...), operating costs (including energy, spares, maintenance) and end-of-life costs such as decommissioning, removal and disposal (EC, 2008).

In the directive, “tendering” is not defined. Throughout literature multiple definitions are used; according to Brackmann and Verlinden-Bijlsma (2011, 17), tendering is the act of asking several parties for offers which meet certain requirements and assessing these offers in a transparent and objective way.

3. Institutional & legal framework

Transparent, fair and competitive public procurement across the EU is vital for economic growth and the creation of jobs. A professionalization of public procurers is essential for a more efficient, effective, citizen- and business-friendly public administration and can only be reached with a change. Therefore, the EU started to rethink the whole approach: According to the European Commission (2017b), the government procurement is a driver for EU 2020 policies and should use its power strategically to create a more innovative, greener, and socially-inclusive economy. The differences in the institutional frameworks for public procurement within the EU are significant. In recent years, several member states reformed their procurement practices under the GPP 2020 project, which resulted in savings of more than 900,000 tons of CO₂ equivalent³ (EC, 2017c, 4). Three different kinds of public procurement can be observed:

- (1) public procurement is either decentralised or centralised within one ministry (Authority for the Supervision of Public Contracts, 2010);
- (2) public procurement takes place in individually established organisations or departments, each within a different scope;
- (3) public procurement gets conducted in independent bodies, so called shared service centres.

Shared service centres have an advantage of conducting procurements especially efficiently und bundle knowledge and resources (Haskilic, 2012, 58). Estonia, Greece, Ireland, Netherlands, Poland, Sweden do not have a centralised organisation for purchasing, while currently, Austria, Belgium, Denmark, Finland, Hungary, Iceland, Kosovo, Lithuania, Malta, Portugal, Romania, Spain, Turkey, United Kingdom have shared service centres. According to the European Commission (2017c, 4), France established the State Purchasing Directorate in March 2016 to define the state's purchasing policy and deliver training to public buyers. Further, in Italy a coordinated

³ 40 public authorities from 8 EU countries launched more than 100 tenders under the EU funded GPP 2020 project which calculated the saved amount of CO₂ equivalent (EC, 2017c, 4).

system was introduced to identify needs and procedures for cooperative procurement. This led to an average saving of 23%.

They aim at the same goals (standardization of procedures and achievement of economies of scale) but the national legal frameworks as well as their operational behaviour differ significantly within these countries (Research Unit Consip, 2007). In comparison to private procurement, the public procurement is highly regulated by law. According to Buhr (2009), the private sector is less regulated because enterprises face fierce competition, which leads to rational decisions. On the contrary, public entities are more closely scrutinized by the public because of their proneness to corruption. Hence, it is clear that procurement law wants to minimize the threat of corruption by defining rules and regulations, e.g. which kinds of contracts can be set up under which conditions (Knabl, 2015, 9). Measures against fraud and corruption should be focused on, e.g. through improved governance, the simplification of procedures and the usage of electronic tools (EC, 2017b). Slovakia, for example, introduced a contract register to publish all contracts concluded by Slovakia's public authorities, thus improving transparency and allowing for public scrutiny (EC, 2017c, 4).

3.1 European Union regulation

The basic freedoms of the internal market within the European law are the basis of any further legislation within the EU and hence also apply to public procurement (European Union, 2010; Bundesvergabegesetz, 2006): free movement of goods (Art 28), free movement of services (Art 49 and Art 56) and freedom of establishment (Art 43) and free movement of workers (Art 45). Furthermore, Art 12 of the EU Treaty declares that any kind of discrimination on the grounds of nationality is prohibited.

European legislation has three sources of legislation acts. The legal order is usually divided into primary legislation (the Treaties and general legal principles and their amendments), secondary legislation (regulations, directives and decisions which are based on the Treaties) and supplementary law. Each is defined by its impact on national members' law (European Union, 2010):

- (1) Primary law is binding to all member states and prevails over national law.
- (2) Secondary law:
 - a. Regulations are legally binding in their entirety to all member states and do not need translation into national law. Their aim is to harmonise

legislation on crucial matters in the member states in order to enforce and ensure the principles of the internal market.

- b. Directives can be addressed to any number of member states and set goals. It is up to the member state how to implement actions to achieve the desired outcome within a certain timeframe and in compliance with EU primary law.
- c. Decisions may be addressed to one or more member states as well as companies and institutions and are directly binding.

The core of European Procurement law is based on Art 26, 34, 53(1), 56, 57, 62 and 114 of the Treaty on the Functioning of the European Union (TFEU) but mainly determined by regulations which are regularly amended:

- (1) EU directive 2004/17 and 92/13/EC – coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors
- (2) EU directive 2004/18 – procurement contracts for public works, public supply and public service.
- (3) EU directive 89/665 and its substantial amendment 2007/66/EC – improving the legal framework for contracts and tenders.

In accordance with the European Growth strategy “Europe 2020”, the “Green paper on the modernisation of EU public procurement policy - Towards a more efficient European Procurement Market” got published by the European Commission in 2011 (Directive 2014/24/EU, 2014, Art (2)):

“Public procurement plays a key role in the Europe 2020 strategy, set out in the Commission Communication of 3 March 2010 entitled ‘Europe 2020, a strategy for smart, sustainable and inclusive growth’ [...], as one of the market-based instruments to be used to achieve smart, sustainable and inclusive growth while ensuring the most efficient use of public funds. For that purpose, the public procurement rules [...] should be revised and modernised in order to increase the efficiency of public spending, facilitating in particular the participation of small and medium-sized enterprises (SMEs) in public procurement, and to enable procurers to make better use of public procurement in support of common societal goals. There is also a need to clarify basic notions and concepts to ensure legal certainty and to incorporate certain aspects of related well-established case-law of the Court of Justice of the European Union.”

A market research showed that current directives are too rigid and limit the flexibility to set environmental, social and innovative standards. To maintain its competitiveness and reach the goals of “Europe 2020”, tender procedures should get simplified and provide procurers with a framework that enables them to pursue societal goals (Knabl, 2015, 15). According to the recital 47, *“public authorities should make the best strategic use of public procurement to spur innovation”* because *“buying innovative products, works and services plays a key role in improving the efficiency and quality of public services”*. Further mentioning of the Europe 2020 strategy in the directive is in the recital under 96 and 123.

The green paper was the basis of an amendment in public procurement law, which was passed in 2014 and has been in effect in the member states since January 2016. The new directives 2014/24 and 2014/25 are replacing the original directives 2004/18 and 2004/17. Two key factors are explicitly mentioned in the directives: increased use of negotiation procedures for complex products and services and increased use of e-tendering tools as a simplification, especially for SMEs (EC, 2014b). The strong emphasis on innovation and ecological and social sustainability shall lead to an increase in innovative and sustainable purchases through the reviewed procedures and tools. The innovation partnership got established especially for products or services that are crucial to society but not available on the market yet. The aim is to build long term cooperation between the government, companies and research institutions to develop a solution along the supply chain (Knabl, 2015, 28).

3.2 Austrian Law

The Austrian constitution defines in § 127b (3) three main principles for public organisations. Public procurers are bound to act accordingly with (Bundesverfassung, 2015):

- (1) **Economic interest:** Public investments and spending shall only be conducted if necessary;
- (2) **Efficiency:** Scarce resources, such as human capital and money, should be used in a way to generate the best possible output with the least possible input;
- (3) **Expediency:** Amongst various options, the option that serves the goal the best is to be chosen.

To ensure that public money is spent responsibly, the Austrian Court of Auditors monitors the financial activities of public organisations. Further, two more principles are in practice, namely transparency and equal treatment (non-discrimination). This means that all procedures concerning awarding public contracts must be transparent and must use objective and accountable criteria. Therefore, calls for tenders must be widely communicated so every company interested has a fair and equal chance to compete. The location of a bidding company must not be seen as an exclusion criterion (Moschitz, 2008, 13). Furthermore, occasional demands for “best value for money” can be heard, but this is not explicitly mentioned in procurement law.

According to Austrian Procurement Law section §19 (5-7), aspects of innovation and sustainability can be taken into consideration, yet still at the most favourable price (BVergG, 2006; Knabl, 2015, 10).

3.3 Rules and Procedure

The recital of the Directive 2014/24/EU says

“(1) The award of public contracts by or on behalf of Member States’ authorities has to comply with the principles of the Treaty on the Functioning of the European Union (TFEU), and in particular the free movement of goods, freedom of establishment and the freedom to provide services, as well as the principles deriving therefrom, such as equal treatment, non-discrimination, mutual recognition, proportionality and transparency. However, for public contracts above a certain value, provisions should be drawn up coordinating national procurement procedures so as to ensure that those principles are given practical effect and public procurement is opened up to competition.”

Generally, public authorities have to follow certain rules and criteria: EU law sets a minimum of harmonized rules to provide a transparent and fair public procurement process. These rules got transported into national legislation by the EU member states and apply to tenders whose monetary value exceeds certain thresholds (Your Europe, 2016). If the tender’s monetary value is below these thresholds, national rules apply which necessarily have to respect the general principles of EU law (EC, 2017). Procedures for procurement below the threshold are more simplified compared to the EU-wide tenders. Depending on the good or service procured and the (national)

threshold, there are several types of public procurement procedures, for example open procedure, restricted procedure, negotiated procedure, competitive dialogue and electronical auctions. Each procedure has to follow certain rules, but some rules are valid for every procedure. For instance public authorities (Your Europe, 2016)

- (1) “may not discriminate [...] a business because it is registered in another EU country;*
- (2) may not refer to specific brands, trademarks or patents when describing the characteristics of products & services they wish to purchase;*
- (3) may not refuse to accept supporting documents (certificates, diplomas etc.) issued by another EU country, as long as they provide the same level of guarantee;*
- (4) must make all information regarding tenders available to all interested companies, regardless of what EU country they are registered in.“*

To ensure quality and transparency, public authorities use different award criteria concerning price, technical characteristics and environmental aspects etc. when evaluating tenders (Your Europe, 2016).

In Austria, instruments commonly used for promoting procurement of innovations are (Interview partner 3, 2018)

- (1) Restricted and negotiated procedure
- (2) Pre-commercial Procurement (PCP) and
- (3) Competitive Dialogue

The difference between the innovation partnership and the above stated procedures will be laid down in Chapter 4.4. Summary of an innovation partnership.

3.3.1 Restricted and negotiated procedure

In a restricted as well as in a negotiated procedure, the contract notice published contains detailed criteria which have to be fulfilled by the applicants. In both procedures the number of permissible participants is limited. While in a restricted tender those participants who are most suitable are invited to submit a final offer, the businesses in a negotiated procedure can be chosen arbitrarily by the contracting authority. In the latter case, the businesses negotiate the terms of the contract and based on these negotiations they submit an offer on the basis of which the tender is awarded. So the

restricted procedure provides a certain scope to negotiate an adapted tender document (Interview partner 3, 2018). In a restricted procedure (as well as in an open tender), negotiation is not allowed. The decision on the award is based on the written offer (European Union, 2015).

3.3.2 Pre-commercial Procurement (PCP)

Pre-commercial procurement is a tendering procedure which is recommended by the European Commission for R&D-services (IÖB, 2015, 6) but is still underused in Europe compared to other parts of the world (EC, 2017a). The European Union defines PCP as “... *the procurement of research and development of new innovative solutions before they are commercially available*” (EC, 2017a). Hence, PCP can be seen as a pattern of how to deal with such a project by giving multiple companies the necessary conditions to develop concepts or prototypes to achieve the best outcome (Interview partner 3, 2018). Further, according to the European Commission (2017a), PCP is “*an important tool to stimulate innovation as it enables the public sector to steer the development of new solutions directly towards its needs.*” Via Horizon 2020 the EU supports public procurers who work together on joint PCPs.

Edquist and Zabala (2012, 8) point out that this procedure is more a contract procurement than it is a procurement. Core element is the possibility of developing innovative solutions with multiple competing suppliers in successive stages to compare alternative solution approaches.

After each phase the number of providers gets reduced (IÖB, 2015, 6). Figure 1 shows the stages of a PCP (EC, 2015). R&D phases are split into solution design, prototyping, original development and validation/testing of a limited set of first products. Depending on the complexity of the R&D processes the number of phases varies (IÖB 2015, 8). PCP puts an emphasis on co-evolution between both parties to develop the specifications and characteristics of the solution needed (EC, 2006, 6). So one can say that PCP is a demand side policy (need stimulates the market) as well as a supply side policy (Knabl, 2015, 13f). Both parties cooperate, putting emphasis on co-evolution to develop the specifications and characteristics of the solution towards the procurer's need (EC, 2006, 6), namely feasible and implementable research. The risks and benefits resulting from the project are shared by public procurers and suppliers; suppliers retain intellectual property ownership rights, while procurers keep some usage and licensing rights (EC, 2017a). The research result can be bought in a

separate procurement process, which is then called “public procurement of innovation (PPI)”. Hence, PCP can be seen as complementary to Public Procurement of Innovative Solutions.

The performance of a PCP is reasonable (IÖB 2015, 7),

- (1) if there is a strong demand for a solution which cannot be met with available solutions;
- (2) if the competition between innovative approaches should be carried out;
- (3) if the improvement of the innovative solution justifies investments in terms of time and money.

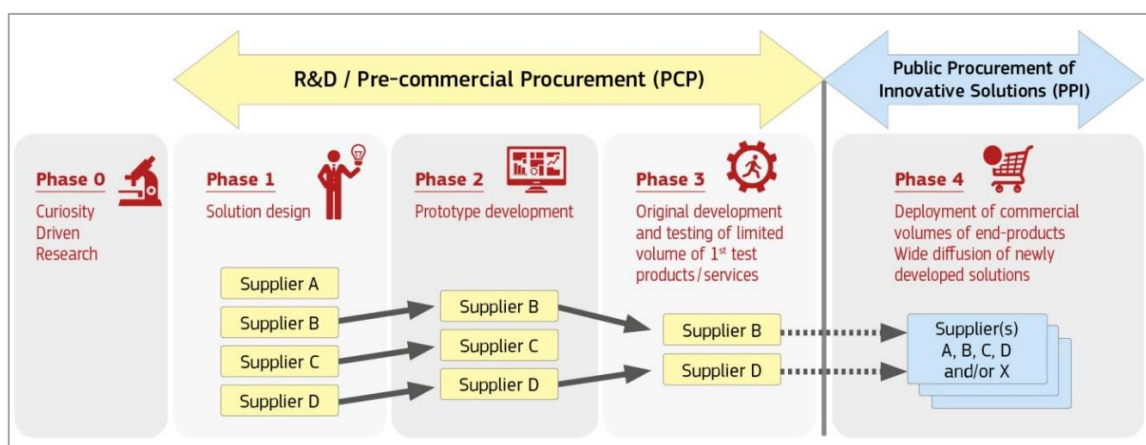


Figure 1: Stages of a PCP (EC, 2015)

PCPs can be seen as an additional tool for promoting innovation as subsidies, tax incentives, improved access to finance, shared initiatives for technology etc. Further, they could shorten time to market and encourage market acceptance of new technologies (Commission of the European Communities, 2007, 12). Therefore, they may lead to the establishment of concern areas of public interest like energy efficiency, environmental protection, health sector, security and many more (Commission of the European Communities, 2007, 13).

3.3.3 Competitive Dialogue

The competitive dialogue is used for “*particularly complex*” services or products, where neither the open procedure nor the restricted procedure will “*result in the best value for money*” (EC, 2014f, 36). “Particularly complex” means that the contracting authority is unable to specify the technical means or the legal/financial makeup of the project.

According to (Interview partner 3, 2018), the competitive dialogue provides a certain amount of freedom to let the suppliers influence the tender documents.

First a publication (“contract notice”) defines the needs and basic requirements of the tender and it is up to the procurer how narrow the requirements will be defined. Then the applicants submit their first offer (proposed solutions and ideas) on which the invitation to the negotiation round is based. Just those who satisfy the selection criteria of the contract notice are invited. The dialogue is conducted separately with each candidate defining the solution that can be offered. By applying the award criteria at a pre-dialogue state, the number of solutions for the dialogue gets reduced. After the negotiation rounds, contracting authorities must ask the applicants to submit one final offer *“on the basis of the solutions presented and specified during the dialogue”* (EC, 2014f, 36f). It is not allowed to choose the best options from different tenderers (“cherry picking”).

For this procedure no specific threshold applies. Prices or payments to the participants have to be specified in the dialogue and the contract which is most economically advantageous has to be awarded. However, the European Commission states in their Practical Guide (2014f, 37) the competitive dialogue *“is exceptional and must be used carefully”*.

4. Most important legal provisions of Innovation Partnership

As already mentioned in the objective, the aim of this paper is to compare the implementation of the EU directive 2014/24/EU with the Federal Tendering Act 2017 in Austria to examine the scope within Austrian domestic law. The EU directive 2014/25/EU is explicitly defined as a non-goal of this paper. The main provision of the EU directive is § 31 – Innovation Partnership; the provisions in the Federal Tendering Act are divided into several parts, namely in

- (1) § 31 – Definition
- (2) § 41 - Legal permissibility of the usage of the tendering procedure
- (3) § 118 – Goals and Objectives
- (4) §§ 119 and 120 – Procedure of the tendering act
- (5) § 121 – Implementation after the award

4.1 EU Directive 2014/24/EU

This chapter addresses the question how the EU directive is to be dealt with:

- (1) What is an Innovation Partnership?
- (2) In what cases is the Innovation Partnership applicable?
- (3) What does a tender procedure look like?
- (4) What does a potential contract look like?

To get a fuller picture, these questions shall be discussed with references to the recital of the directive. The structure of this chapter is based on the structure of the Federal Tendering Act as the EU Directive shows no clearly recognisable structure.

4.1.1 What is an Innovation Partnership?

The most important piece of information is that the innovation partnership is not just a tender procedure but also a contract type. The innovation partnership can only be used in combination: first the tender procedure and the subsequent contract. This gives procurers the opportunity to procure the best solution for their problem without starting a new - separate - procedure. If it is contemplated in the documents, it is possible to abandon the tendering after each step. Still, the aim and intention of this procedure is to have a whole procedure. This is also the biggest difference compared to usual tender procedures.

The goal is to develop an innovative product, service or work (Art 31 (2)) that is not available on the market (yet) (Art 31 (1) second paragraph). Procurers shall define the minimum requirements to be met by suppliers which are the basis of the supplier's decision to participate in the procedure or not. Furthermore, the procurer and the supplier aim at a long-term cooperation to guarantee the best result for both parties.

As laid down in Art 1 and Art 4, the value of the whole procedure must not exceed a certain threshold.

4.1.2 In what cases is the Innovation Partnership applicable?

As already mentioned in 3.1, the innovation partnership is meant for the development and the subsequent purchase of the resulting innovative products, services or works. A prerequisite is that the needs mentioned cannot be met by solutions currently provided by the market. The innovation partnership is intended to be a market-sided (market-

pull) policy, whether it is a very large or small innovative project: *“Incentivising the development of an innovative solution without foreclosing the market”* (Recital 49).

According to the EU directive (Recital 49), *“the innovation partnership should be based on the procedural rules that apply to the competitive procedure with negotiation”*. It is mentioned – for the first time - that contracts should be awarded on the basis of the best price-quality ratio (instead of just most favourable prices). Further, the procedure should allow establishing a long-term innovation partnership so suppliers can deliver the solution at agreed performance levels and costs, *“without the need for a separate procurement procedure for the purchase.”*

Under Art 4 (6) the planned costs of an innovation partnership project are contemplated: The value shall be the maximum estimated value net of VAT of the research and development activities.

4.1.3 What does a tender procedure look like?

Several obstacles and problems have been mentioned by operators, suppliers and procurers. To avoid those problems, the innovation partnership aims to simplify the process. Following approaches are named in the recital:

(1) The recital 48 says that due to the importance of innovation and therefore the openness for variants, *“the attention of authorities should consequently be drawn to the need to define minimum requirements”* of possible solutions. This should happen prior the submission of variants.

(2) The recital 84 also says that many economic operators mentioned administrative burdens as an obstacle to their participation: E.g. a great number of certificates or other documents are related to the exclusion and selection criteria. A *limitation “of such requirements [...] could result in considerable simplification for the benefit of both contracting authorities and economic operators.”*

(3) One goal is to achieve objectives of sustainability. Hence, *“it should be possible to submit tenders that reflect the diversity of technical solutions standards and technical specifications in the marketplace”* (Recital 74). Those criteria are linked to life cycle and the sustainability of the production process. This means that technical specifications and requirements should avoid artificially narrowing down competition: *“Functional and performance-related requirements are also appropriate means to favour innovation in public*

procurement and should be used as widely as possible” (Recital 74, second paragraph).

(4) Contracting authorities should be able to refer to *“specific environmental, social or other characteristics labels, [...] such as the European Eco-label, (multi-)national eco-labels or any other label”* fulfilling the requirements (Recital 75). Those requirements should be adopted on the basis of objectively verifiable criteria. References to labels should not have the effect of restricting innovation.

Concerning the procedure, the EU directive specifies the following rules: At the core of the directive - which is laid down in Art 31 (2) and (5) – are the successive stages in the procedure, following the sequence of steps in the research and innovation process in order to reduce the number of tenders. Negotiations take place by applying the award criteria specified in the contract notice, the invitation to confirm interest or in the procurement documents. Further, *“the innovation partnership shall set intermediate targets to be attained by the partners and provide for payment of the remuneration in appropriate instalments.”*

Art 31 (1) specifies that any economic operator is allowed to submit a request for his or her participation by providing the information for a qualitative selection. Prior – in the procurement documents – the contracting authority has to identify the need for the requested solution and has to define the minimum requirements to be met by all tenders. The scope of the required solution has to be sufficiently precise so that the economic operators are able to decide whether to participate (Art 31 (1) second paragraph). From the sending date of the contract notice until at least 30 days afterwards, suppliers have the chance to announce their participation. *“Only those economic operators invited by the contracting authority following the assessment of the information provided may participate in the procedure”* (Art 31 (1) fourth paragraph). Selection of the suitable candidates has to be in accordance with Art. 65 (*“Reduction of the number of otherwise qualified candidates to be invited to participate”*) and the contracts shall be awarded on the basis of the award criterion of the best price-quality ratio in accordance with Art 67 (*“Contract award criteria”*). Criteria for the selection of candidates shall be within the *“candidate’s capacity in the field of R&D of developing and implementing innovative solution”* (Art 31 (6)).

During ongoing negotiations contracting authorities shall ensure that all tenderers are treated equally, e.g. they must not provide information in a discriminatory manner, reveal confidential information or provide insufficient or inappropriate time to tenderers

to modify and re-submit amended tenders (Art 31 (4) and Art 31 (4) second paragraph). Art 31 second paragraph specifies further equal treatment concerning refraining from transferring confidential information of proposed solutions. To improve the content and to reach the best outcome, contracting authorities negotiate the initial and subsequently submitted tenders with the suppliers. The final tender, the minimum requirements and the award criteria are excluded from the negotiations (Art 31 (3) second paragraph).

4.1.4 What does a potential contract look like?

Chapter 3.1 mentions the most important aspect of the innovation partnership, namely the combination of the tender procedure and the contract type. Both parts are not separated anymore and it is possible to set up the innovation partnership with one or several partners conducting separate R&D activities” (Art 31 (1) third paragraph). Both the procedure and the contract shall be structured in successive phases following sequences of steps in the research and innovation process. The structure, duration and value of the different phases shall *“reflect the degree of innovation of proposed solution and the sequence of the research and innovation activities”* (Art 31 (7)). The relation of the estimated value of supplies to the investment of the development shall not be disproportionate.

Further, *“the innovation partnership shall set intermediate targets to be attained by the partners and provide for payment of the remuneration in appropriate instalments”* (Art 31 (1) third paragraph). Based on those targets – which have to indicate these possibilities and the conditions for their use in the procurement documents - the number of partners gets reduced by terminating individual contracts (Art 31 (1) third paragraph). Analogous to Art 31 (4), contracting authorities shall refrain from transferring proposed solutions or other confidential information communicated by tenderers without their agreement (Art 31 (5) second paragraph). Arrangements applicable to intellectual property rights shall be defined in the procurement documents.

4.2 Federal Tendering Act 2017

This chapter deals with the domestic implementation of the EU Directive 2014/24/EU in Austria, the Federal Tendering Act 2017 (Vergaberechtsreformgesetz 2017). Questions concerning similarities and differences as well as scope and opportunities shall be answered:

- (1) What is an Innovation Partnership?
- (2) In what cases is the Innovation Partnership applicable?
- (3) What does a tender procedure look like?
- (4) What does a potential contract look like?

4.2.1 What is an Innovation Partnership?

The recital to the government bill notes that a performance of a negotiated procedure with some characteristics is necessary to complete an innovation partnership. This means the actual tender procedure until the award. Further, the special characteristics of the innovation partnership are the provisions after the award notice, namely the performance of R&D services as well as the acquisition phase.

In general, Art 31 (1) defines how the purchasing of goods and services has to be conducted: as an *“open tender, restricted procedure, negotiated procedure, framework agreement, dynamic purchasing system, competitive dialogue, innovation partnership, direct award or direct award with previous notice”*. If the innovation partnership gets chosen for the tendering, an unlimited number of producers get invited to submit their participation request. Afterwards the chosen and valid applicants have to submit their offer for the development of innovative products, services or works. Subsequently, negotiations concerning the content of the procedure between the contracting authority and the valid applicants (the innovation partners) start. Analogous to the EU directive, the aim of an innovation partnership is laid down in § 118 (1): The aim is the development of an innovative product, work or service which cannot be provided by the market (compare: Art 31 (2) and Art 31 (1) second paragraph of the EU directive), provided that they correspond to the performance levels and maximum costs agreed. The costs of the innovation partnership *“shall not be disproportionate in relation to the investment required for their development”* (§ 118 (2)).

4.2.2 In what cases is the Innovation Partnership applicable?

According to the §2 Z 20 and § 41 BVergG 2017, the innovation partnership is only valid for the realisation of new or significantly improved products, services or works, production, building or construction processes, new marketing methods, or a new organisational method in business practices, workplace organisation or external

relations. If any of these services named is already available on the market, the innovation partnership cannot be the tender procedure of choice.

According to interview partner 2 (2018, translated by the author), the innovation partnership has great potential if used in the right way. Due to additional expenses and therefore higher risk, the innovation partnership is applicable just for fields where procurements of innovation are reasonable. This could be organisations which rely on innovation, like the Austrian Federal Railways. Others profit from the transfer of know-how and financial resources. Interview partner 3 (2018) recommends the innovation partnership for projects with limited R&D to estimate the outcome.

4.2.3 What does a tender procedure look like?

The procedure of the tendering act is laid down in § 119 and the procedure of the negotiations can be found in § 120: Analogous to Art 31 (1) of the EU directive, the Federal Tendering Act says that procurers shall define the minimum requirements to be met by suppliers. Again, the requirements have to be precise due to their importance for the supplier's decision to participate in the procedure or not (§ 119. (1)). § 119 (2) lays down that criteria for the selection of candidates shall be within the *“candidate's capacity in the field of R&D of developing and implementing innovative solution”*, again this can also be seen in Art 31 (6) of the EU directive. In the tender procured the contracting authority has to decide whether one or several partners are allowed to participate and how to deal with questions concerning intellectual property rights (§ 119 (3) and (4)).

As the innovation partnership combines development and delivery of a good or service within one procedure and awarding, there is no more competition between those stages (Interview partner 3, 2018). Hence, time and effort may be reduced for procurers. But according to interview partner 3 (2018), solid planning and negotiations including setting the costs at the early awarding stage are needed. But especially the estimation of the price may be difficult for projects aiming at fundamental research (Interview partner 3, 2018). Further, one issue might be that smaller enterprises may be knocked out because they cannot render services on the large scale supply but would deliver innovative solutions during the development stage.

As already laid down, the minimum requirements have to be considered as the basis of the supplier's participation as well as for the first offer of the provided solution. Further, this first offer is the basis of later negotiations (§ 120 (1)).

The performance of the innovation partnership is analogous to a negotiated procedure: Regulations concerning the negotiated procedure can be found in § 114. The differences between a negotiated procedure and innovation partnership are (§ 120 (2) 1-3):

- (1) Negotiations are mandatory. The innovation partnership must not be based on the first offer.
- (2) Contracting authorities may negotiate in the final round with one supplier instead of several suppliers.
- (3) The final decisions may be based on award criteria and on valid final offers which comply with the minimum requirements.

4.2.4 What does a potential contract look like?

In regard of drafting a contract, the procurement law includes barely any restrictions or regulations and no explicit exception from general restrictions is applied in an innovation partnership. Hence, any contractual law can be used even if there are a few explicit rules concerning the objective of the contract (Interview partner 1, 2018). Even though this minor restrictions, there is very little leeway in changing them afterwards. According to interview partner 2 (2018, translated by the author), the regulations should not be too detailed to avoid limitations of the scope. Otherwise the adaption of the contract would become a major obstacle in reaching the best outcome (Interview partner 1, 2018, translated by the author).

In general, the draft of the Federal Tendering 2017 agrees with the EU Directive (Interview partner 2, 2018, translated by the author). The contracting authority may decide whether the innovation partnership is built with one or several partners. If several partners are valid, it is necessary that every partner performs their R&D activities by themselves (§ 121 (1)). As the procedure is divided in subsequent phases, this is also valid for the contract. Further, the contract has to specify the setting of intermediate targets which have to be attained by the partners and the provisions for payment of the remuneration in appropriate instalments (§ 121 (2)). On the basis of the

intermediate targets, the contracting authority may decide whether to continue the partnership or stop further activities.

The structure of the partnership, including the duration and the value of the different phases, has to reflect the degree of the proposed solution's degree of innovation. Concerning questions of intellectual property barely any regulations limit the contracting authority in drafting the documents (Interview partner 2, 2018, translated by the author). One possible way is stating in the contract, that all expenses during the development phase get covered by the contracting authority. In this case the supplier barely bears any financial risk (Interview partner 2, 2018, translated by the author) and it is ensured that the risk and chances are related sensibly to each other (Interview partner 1, 2018, translated by the author). Another possible way is that the contracting authority only pays for the delivered performance. According to interview partner 2 (2018, translated by the author), this way may be questionable.

In both cases the payments should be appropriate in regard with carrying the risks. To name an example, if the intellectual property remains in the hand of the supplier, the payment may be lower. The supplier brings in own resources (financial risk, personnel expenditure) but gets paid if intermediate goals are achieved (Interview partner 3, 2018). So the supplier gets reimbursed and is able to gain knowhow (Interview partner 2, 2018, translated by the author). Hence, contracting authorities shall refrain from transferring proposed solutions or other confidential information communicated by tenderers without their agreement (§ 121 (4)).

In the end, the procurement of the innovative solution is only valid if the agreed level of performance is reached and the maximum cost threshold is not exceeded. One award for all phases is valid.

4.3 Procedure of an innovation partnership

Before contracting authorities chose the innovation partnership as the best process available, a survey and analysis of their needs has to be conducted. This can be part of the provided performance of a supplier. According to interview partner 1 (2018, translated by the author) this kind of customizing may lead to a lower degree of innovation. But at the same time it can be ruled out that such a customized solution can be met at the current market. It may be possible that the market provides similar solutions but the innovation partnership gives room for the procurement of optimized

and tailored services and products (Interview partner 1, 2018, translated by the author). There is no final specification while the tender procedure is still ongoing because the product or service will be developed after concluding the procedure (Kuchar et al., s.a., translated by the author).

This subchapter shows the procedure of an innovation partnership which is conducted in two phases: first the negotiations procedure, followed by the cooperation in the award contract. Figure 2 illustrates the procedure steps with further information.

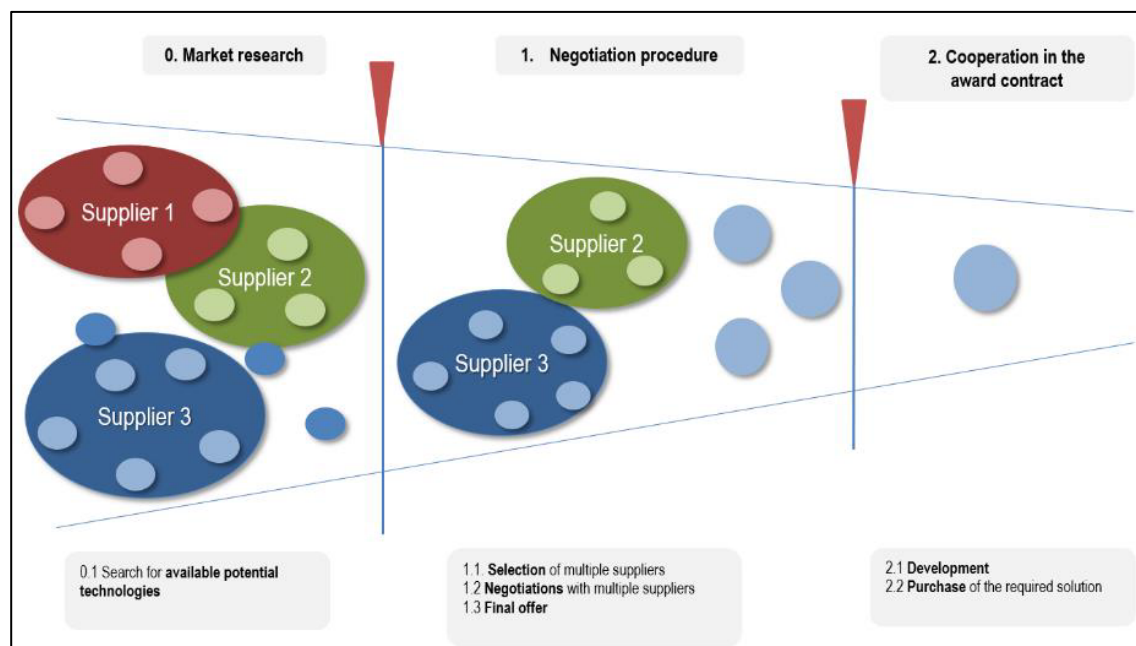


Figure 2: Procedure of an innovation partnership (author's representation, 2018)

4.3.1 Phase 1 – negotiation procedure

First the contracting authority needs to conduct a negotiation procedure with prior notification which takes place in several process steps. In a first step, the suppliers' application gets assessed for the selection of at least three candidates. The selection criteria should query the ability of the potential supplier on the specific topic as well as the capability of the development and implementation of such an innovative solution. Only those candidates who seem to meet the selection criteria are invited to submit a first offer for the innovation partnership. The contract documentation – which is the basis of the following negotiations - has to include the minimum criteria as well as questions concerning intellectual property, e.g. patents, copyright (Kuchar et al., s.a., translated by the author).

After the consultation of the first offers, negotiations with each bidder take place respectively to improve the quality of the offers. All documents submitted and negotiations will be kept confidential. Eventually an innovation partnership with one or multiple suppliers with prior set award criteria will be concluded (Kuchar et al., s.a., translated by the author).

4.3.2 Phase 2 – cooperation in the award contract

Phase two includes two steps: The development and the purchase of the required solution. In the former one, specific milestones and the payment of respective remuneration have to be defined. In case the provided outcome of a milestone does not meet the solution's requirements, the innovation partnership may be terminated prematurely if the contracting authority decides so. Benefits of this approach are the constant control to reach quality goals as well as the estimation of possible extra costs at an early stage. It is of utmost importance that the costs must not exceed the threshold. Otherwise the purchase of the service or product developed is prohibited (Kuchar et al., s.a., translated by the author).

In summary, prerequisite for the purchase of the tendered solution are

- (1) the possibility to develop such a solution,
- (2) the solution complies with the specifications and
- (3) the costs are below the planned limit (Kuchar et al., s.a., translated by the author).

According to interview partner 3 (2018) several questions need to be answered within the contracting authority before a successful innovation partnership may start:

- (1) *"How much time do I have to invest in market research and sounding before I can get started with the actual IP?"*
- (2) *How and where do I have to announce my intention to start an innovation partnership so that suppliers with an existing product could approach me?*
- (3) *Do they have to approach me?*
- (4) *How can I make [...] sure [...] that no one will lodge an appeal?"*

4.4 Summary of an innovation partnership

The purpose of the innovation partnership is to drive sustainability towards a smart, sustainable and inclusive growth to solve societal challenges: Fostering innovation

shall strengthen the Europe 2020 strategy. Basically, the innovation partnership can be seen as a negotiated procedure with prior notification or a direct award (Interview partner 1, 2018). While the negotiated procedure with prior notification per se is not new, some characteristic of the innovation partnership can be seen as special. It is of greatest importance to determine different eventualities in the contract. Especially some aspects have to be kept in mind while drafting a contract (Kuchar et al., 2018, translated by the author; Interview partner 1, 2018, translated by the author):

- (1) Contracts are awarded without final specifications. Procurement law provides certain flexibility of the design, so it is also valid to tender (parts of) the service or products separately or collectively.
- (2) One tender covers all stages and phases; the handling of the innovation partnership is divided in separate phases. Intermediate targets to be attained by the partners and provide for payment of the remuneration in appropriate instalments shall be set per phase. Drafting the specifications can be done either in a constructional or functional description. In the constructional contract, the procedure of the service or product is described, while in the functional contract only to be achieved results are defined (Interview partner 1, 2018).
- (3) After the development no separate tender procedure is necessary. The procurement is part of the innovation partnership but still thresholds for the level of performance and costs have to be defined. Applicants, who are not valid and therefore not invited for offers, are not allowed to submit an offer.
- (4) The following purchase of the product or service developed takes place without a separately awarded tender procedure. After finalizing each step, an intermediate evaluation is intended to stop the innovation partnership if necessary.
- (5) An innovation partnership is possible with multiple suppliers which realize different projects. Hence, negotiations are mandatory (Interview partner 1, 2018).

Below a summary of the new characteristics and differences to the common procurement processes shall be given.

Reduction of partners:

The negotiation phase - with at least one round – is possible with one or several producers while in standard procedures negotiations have to take place with at least three suppliers to enable a competitive setting (Interview partner 1, 2018, translated by

the author). The number of applicants gets reduced after each round if these applicants do not fulfil the criteria of the respective development step. This can be seen as beneficial due to the savings of time and effort by eliminating negotiations with additional suppliers but has also several disadvantages: the limitation of options available and a decrease in competition (Interview partner 1, 2018, translated by the author). Further, the reduction of partners is depending on the budget. Hence, intermediate evaluations are necessary and may lead to an early abandonment of the project (Interview partner 1, 2018, translated by the author; Interview partner 2, 2018, translated by the author).

The award phase of an innovation partnership allows awarding multiple contracts with multiple producers concurrently while in standard procedures the contracting authority has to select only one operator. According to interview partner 1 (2018), *“the possibility to postpone the final decision to a point long after the award procedure can impact the overall results greatly”* and may be *“an exclusive advantage to the Innovation Partnership”*.

In general, reasons for termination are not part of the procurement law primarily. They have to be regulated in the contract in the same way as other contracts. Although the procurement law does not explicitly prohibit contractual terms concerning the abandonment of projects at any time, two restrictions are given (Interview partner 1, 2018; Federal Tendering Act, 2017, §20 (1)):

- a. The supplier must not be suffering a gross disadvantage. Therefore, the contract needs to include the reimbursement for the rendered service.
- b. According to the principal of equal treatment for all suppliers, the decision making standards apply for all identically.

Monitoring

The contracting authority needs to undertake a monitoring regularly over the whole project period to identify problems on an early stage if necessary (Interview partner 2, 2018, translated by the author).

Confidentiality

The obligation to maintain confidentiality must be given to protect the partners' knowhow respectively (Interview partner 2, 2018, translated by the author). As already mentioned, contracting authorities shall refrain from transferring proposed solutions or

other confidential information communicated by tenderers without their agreement (§ 121 (4)).

Cost limits

It is necessary to lay down specific rules concerning the upper cost limit and its assessment (Interview partner 2, 2018, translated by the author).

Communication

It is of utmost importance to stay in touch on a regular basis. Nevertheless, the additional effort should be kept as low as possible (Interview partner 2, 2018, translated by the author).

Dispute settlement

In case of any dispute, a conciliation board should be set up (Interview partner 2, 2018, translated by the author).

Purchase

Certain criteria need to be set up for the selection of the suppliers concerning the solution chosen (Interview partner 2, 2018, translated by the author).

Intellectual property

There are several ways how to deal with intellectual properties but it is important to differentiate clearly which rights and obligations result from the ongoing as well as finished innovation partnership (Kuchar et al., s.a., translated by the author). If there is already a solution available on the market which gets only adapted, it will not be possible to transfer the necessary rights to the contracting authority. This might be problematic due to the increasing risk of the paying development performances without receiving any rights, especially if the project has been abandoned before the purchase phase (Interview partner 1, 2018, translated by the author).

On the contrary, if a solution gets procured which is customized to the contracting authority's need, the copyright will be of little value to the supplier (Interview partner 1, 2018, translated by the author).

5. International Good Practices

The new innovation partnership tendering procedure has just been available since July 1, 2016. While Austria and other European countries are delayed with the implementation into domestic law, inter alia Germany, the United Kingdom and the Netherlands did not just implement the directive but also carried out first projects using the innovation partnership. This chapter puts emphasis on the experiences of two projects: Firstly, the project “Land sucht innovative Fahrzeuge (2016/S 151-272954)” (“State is looking for innovative vehicles”) in Germany, and secondly, the project “iHELP” in the UK. The projects selected were chosen as representative examples to illustrate the extent of the innovation partnership towards sustainability.

5.1 Innovation Partnership in Germany “Land sucht innovative Fahrzeuge (2016/S 151-272954)”

As soon as 2007 the European Commission (2007, 1) revised a previous Directive from December 2005 on the promotion of clean vehicles. The proposal *“aims to reduce fuel consumption as well as CO₂ and pollutant emissions from road vehicles”* (EC, 2007, 1). Public authorities should introduce clean and energy-efficient vehicles for public transport services to achieve a reduction.

In this chapter a summary will be given, followed by an overview of the process, first experiences and strategy approaches. All documents are published online and are available on <http://www.nah.sh/nah-sh-gmbh/vergabeverfahren-2/xmu/>.

5.1.1 Objective of the project

Contracting authorities are the State Schleswig-Holstein and the Ministry of Economic Affairs, Transport, Employment and Technology in Germany. The Nahverkehrsverbund Schleswig-Holstein GmbH (NAH.SH GmbH), which is authorized by the Ministry to award the contract, is looking for an innovative and sustainable mobility solution for non-electrified parts between the Northern and Eastern network. Objective of the tender is the development, production, supply and long-term maintenance of the multiple units with electric powertrain systems (NAH.SH, 2016, 1f). For the contracting authority it is of utmost importance that the scope of the project is as open as possible for technologies. To get the best outcome competition is increased by negotiating with

bidders concerning the contractual arrangements and requirements (Interview partner 4, 2018 translated by the author).

Currently, there is no appropriate low-emission vehicle available on the market. Hence, the innovation partnership is identified as best instrument to reach the project's goal: the minimization of greenhouse gas emissions and pollutants (especially the reduction of carbon dioxide), to provide a customer-oriented service and to improve mobility sustainably. Multiple innovation partners are invited to develop trains with energy supply from traction batteries. Further, refuelling should take place either on-board (hydrogen, synthetic fuel or natural gas) or on the road at newly-built loading stations.

Between 2021 and 2024 the supplier has to deliver 52 or more innovative and low-emission vehicles, which should be in operation up to 30 years. Maintenance has to be guaranteed for at least 19 years (NAH.SH, 2016, 1f). The know-how of the producers should not be narrowed, so the decision which technology fits best will deliberately be left open. Publication in the EU Official Journal took place in August 2016.

According to interview partner 4 (2018), this is the first time that the innovation partnership is applied: With regard to the necessary – and complex - scope and the clear intention to procure, the innovation partnership with potential suppliers seemed to be the best procurement process according to responsible procurers (NAH.SH, 2016, 2). Other procurement processes exclude R&D services and PCPs are limited to the R&D performance without a subsequent tender. But the NAH.SH GmbH needs a combination: Firstly, a closely coordinated development with the market and secondly, the tendering of a very specific and innovative product. The innovation partnership provides the freedom and benefits of both aspects.

5.1.2 Definition Low emission vehicle

Since transport represents almost a quarter of Europe's greenhouse gas emissions, low-emission mobility is of utmost importance to reach a low-carbon, circular economy. At the same time reliable mobility for people and goods needs to be provided (EC, 2016). To provide reliable mobility and also produce the lowest possible level of vehicle emissions, several emissions have to be taken into account. Vehicle-based air pollutants include particulate matter (PM), nitrogen dioxide (NO₂), nitrogen oxide (NO_x), volatile organic compounds (VOC), and sulphur dioxide (SO₂). All these pollutants can lead to health problems, smog or acidification. The main greenhouse gases which are

contributed by the transport sector are carbon dioxide (CO₂), nitrous oxide (N₂O) and methane (CH₄) (OECD, 2004, 26).

According to the OECD (2004, 25), there is no internationally agreed definition of a “low-emission vehicle”. But some states, e.g. the United States, Japan, the EU, have developed some definitions. The OECD defines a low-emission vehicle as a vehicle “*which has low fuel consumption levels (thus producing low levels of CO₂ emissions)*” and/or “*low levels of those emissions which adversely effect [sic] air quality and human health*”. However, according to the International Union of Railways (2014, 14) the members of the Community of European Railway and Infrastructure Companies⁴ (CER) agreed in 2008

- on a CO₂ emission reduction of 30% by 2020 compared to the baseline year of 1990 for the whole European railway sector;
- on a specific average CO₂ emission reduction of 50% by 2030 compared to the baseline year of 1990 from their train operation;
- and by 2030, the total CO₂ emission level from train operation will not exceed in absolute terms even with projected traffic growth compared to the base year of 1990.

Public procurement may boost the use of clean and energy efficient vehicles, which will lead to a reduction of CO₂ and pollutant emissions from the whole vehicle fleet in Europe. Since 2012 the application of award criteria such as the lifetime costs for CO₂ and pollutant emissions has been mandatory (EC, 2007).

5.1.3 CO₂ emission reduction

As Chapter 5.1.4 Process laid down, the tendering process is not finished yet. Unfortunately, a comparison between the old and new technologies is not possible. But in 2008 the NAH.SH (former “LVS Schleswig-Holstein Landesweite Verkehrsservicegesellschaft mbH”) commissioned a report concerning the influence and impact of public transportation on climate change. This report got published in 2009 by the Öko-Institut e.V. and has already been used for the upcoming awarding of the bidders. Hence, the following data is taken from this report.

⁴ CER is a network representing the interests of its member to support an improved business and regulatory environment for European railway operators and railway infrastructure companies. CER members represent 73% of the European rail network length (CER, 2016)

Calculation

According to the Öko-Institut e.V. (2009, 5), the greenhouse gases (CO₂, CH₄, N₂O) were calculated as CO₂-equivalent in accordance with their global warming potential. The following equivalent factors were chosen in respect of a time period of 100 years: CO₂ = 1, CH₄ = 23, und N₂O = 296 (Öko-Institut, 2008). This means that 1kg Methane over 100 years equals a greenhouse gas effect of 23kg of CO₂ and can therefore be seen as a 23kg-CO₂-equivalent.

The CO₂ and greenhouse gas emissions by the rail transport system were calculated for train-kilometre and for the different kinds of trains (locomotive/engine, number of wagons) (Öko-Institut, 2009, 7).

Status Quo 2005

In 2005 around 5.21 M t CO₂ were emitted in Schleswig-Holstein - calculated according to the amount of fuels sold without considering the upstream chain (Öko-Institut, 2009, 23 after Statistikamt Nord, 2008). It is no surprise that using public transportation instead of passenger cars leads to a decrease of CO₂ emission. According to the Öko-Institut (2009, 20), the average CO₂ emission of a car (151g pkm⁵) is about 65 g pkm higher than the emission when taking the train. Due to the good supply of public transportation in Schleswig-Holstein around 105,100t CO₂ were avoided in 2005: Around 2.5kg CO₂ got saved per passenger and ride. In total, the climate advantage of trains in 2005 is around 254,000t, which equals the emission of city with 90,000 inhabitants (Öko-Institut, 2009, 23).

Table 1 shows the transport performance in 2015: About 23.46 M train-kilometres, 1.45 billion pkm and 7.2 billion seat-km were provided. In total about 20% of the capacity of all trains was utilized (Öko-Institut, 2009, 16 after LVS 2009, Intraplan, 2008a).

Table 2: Parameter of regional rail transport in Schleswig-Holstein 2005 (author's representation based on Öko-Institut, 2009, 16 after LVS 2009, Intraplan 2008a)

Parameter	2005
Operating performance	23.46 M train-km
Transport performance	1.45 billion pkm
Capacity of seats	7.2 billion seat-km
Capacity	20%

⁵ per person kilometre

Predictions of the “offensive option” for 2025

The Öko-Institut examined the output of measures by the “offensive option” for the year 2025; the data was taken from the report of the traffic planning office Intraplan Consult GmbH in 2008. Core measures of the offensive option are the following improvements in rail network supply (Öko-Institut, 2009, 5f):

- further capacity for the use of rail;
- closing the gaps of missing rails between certain destinations (e.g. Flensburg – Niebüll or Kiel – Schönberg);
- shorter journey time;
- higher frequencies on main lines (e.g. Hamburg – Flensburg/Kiel).

Below an overview of the planned output will be given. Each measure is a comparison between the years 2005 and 2025: (Öko-Institut, 2009, 27)

- the transport performance of the regional rail transport is expected to increase by 27%;
- the operating performance will be increased by 17,6%;
- the number of seats available will be increased by 11%;
- the CO₂ emission pkm will be reduced by 15% (Öko-Institut, 2009, 11).

This will lead to a CO₂ emission reduction of 11,900t by the regional rail transport system (Öko-Institut, 2009, 28f). If the whole public transportation is taken into account, in 2025 at least 210,000t CO₂ will be reduced (Öko-Institut, 2009, 32). About a third of the improvement concerning the reduced emissions pkm can be explained by the change of the higher utilization and two thirds of the energy savings. Therefore, the CO₂ reduction per train-km (without considering the utilization rate) is about 10%. Table 2 shows the conversion of energy demands in CO₂ and CO₂ equivalents (Öko-Institut, 2009, 11 after TREMOD 2009).

Table 3: Factor for the conversion of energy demands of trains in CO₂ and CO₂ emission equivalents for 2005 and 2025 (author's representation based on Öko-Institut, 2009, 11 after TREMOD 2009)

Type	Unit	2005		2025	
		CO ₂ emissions	CO ₂ equivalents	CO ₂ emissions	CO ₂ equivalents
Traction current	g/kWh	632	684	658	715
Diesel	kg/kg Diesel	3.53	3.56	3.56	3.6

In 2004 around 23% of the operating performance was carried out by diesel locomotives, TREMOD predicts a decrease to 17% until 2025. If this comes true, an additional use of green electricity (which is also a criterion in the Innovation Partnership of NAH.SH) will decrease the CO₂ emissions even more (Öko-Institut, 2009, 40). But currently the Deutsche Bahn AG purchases its electricity from the nuclear power plant Neckarwestheim. Because of Germany's nuclear phase out - and the closure of the nuclear power plant - the specific CO₂ emission will still increase (Öko-Institut, 2009, 12).

The results of the report by the Öko-Institut show that the regional rail transport may have a significant contribution for climate protection. In total, around 105.100 t CO₂ emissions can be saved per year which equals the electricity demand of a city with 40.000 inhabitants; this means each passenger saves up about 2.5 kg CO₂ each time this person takes the train instead of the car.

5.1.4 Process

The process of the innovation partnership can be separated in three different steps: market research, negotiations and final offer. Each round is characterized by the close cooperation between the parties and openness of the potential outcome. In total the performance period last up to 44 months for the construction phase and up to 30 years for the operation (Interview partner 4, 2018, translated by the author).

Market research:

As already mentioned, the innovation partnership is intended for solutions which are not available on the market and therefore are objectives of R&D. NAH.SH conducted a market survey with producers of vehicles available for the German market to assess if the innovation partnership is the best instrument (Interview partner 4, 2018, translated by the author).

Negotiations:

Until September 2016, interested companies were invited to submit their participation for the partnership. Applicants, qualified and valid due to specified criteria, have been invited to five negotiation rounds so far. Each round had several negotiation talks for different topics (NAH.SH, 2016, 3, translated by the author). The aim of these negotiations was to find out about challenges of the technologies offered, repercussions of the operation, infrastructure-sided retrofit solutions as well as

presentations of the bidders. It was not intended to reduce the suppliers after each round but some bidders were excluded if they could not fulfil criteria concerning financial and technical performance (Interview partner 4, 2018, translated by the author). After each round, NAH.SH provided the updated tender documents with specifications and asked bidders for indicative offers. According to NAH.SH, the number of negotiation rounds is important to get the best offers available.

Final offer

Based on the evaluations of the indicative offers and after further negotiations about optimization as well as expectations of profitability, technological feasibility etc., bidders are requested to submit their final offer in September 2018. Unlike the initial intention of an innovation partnership to award several bidders, NAH.SH GmbH will award the best offer of just one bidder in 2019 (Interview partner 4, 2018, translated by the author). Criteria are acquisition cost, life cycle cost (maintenance and energy costs), comfort features and low pollutant- and CO₂-emissions.

All considerations and plans are kept confidential during the tender process.

5.1.5 Experiences and Strategy Approaches

Although the tender is not finalized yet (the planned end of the project is January/February 2019), a few benefits can already be derived from the experience:

- The new tender procedure is new to all parties and therefore very often unknown to procurers as well as suppliers. Nevertheless, producers have already responded with positive feedback.
- NAH.SH consciously wanted to avoid insurmountable obstacles for the participation of the suppliers. As an example, bidding consortia were valid, which has been mentioned as particularly positive by the suppliers.
- Due to the complexity of the project, the schedule got adjusted several times during the negotiations to discuss certain topics in more detail (Interview partner 4, 2018, translated by the author). Results of these discussions got included in the documents which are the basis of the indicative offers.

- The NAH.SH GmbH assigned external experts for the contractual arrangement, technical questions, issues concerning transport and assessment of the offers. In two cases experts' recommendations were requested to deal with concepts offered. Further, a legal counsellor supports and accompanies the whole tendering procedure. (Interview partner 4, 2018, translated by the author)
- The evaluation criteria show very clearly the desire and demand for a sustainable and future-oriented solution. As already mentioned, criteria are acquisition cost, life cycle cost (maintenance and energy costs), comfort features and low pollutant- and CO₂-emissions.
- The maintenance duration is 19 years and the operation duration is 30 years. This means that the NAH.SH GmbH is bound by the final producer. To have options for action, the possibility of reordering more vehicles is laid down in the contract. In this period the supplier guarantees free license for the intellectual property rights as well as the documentation of the operation, maintenance and repair for the vehicles but not for the replica (Interview partner 4, 2018, translated by the author). Rights of use for the R&D-solution remain with the producer.
- With regard to the procurer's capacity, risks of the contracts should remain on the supplier's side due to their necessary know-how (Interview partner 4, 2018, translated by the author).
- In general, depending on the character of the procured solution and in consequence of the complexity of the project, the innovation partnership might be the best option. Nevertheless, the internal know-how and capacity for the procurer is of greatest importance (Interview partner 4, 2018, translated by the author).

5.2 iHELP in the UK (West Lancashire Clinical Commissioning Group)

This chapter aims to give an overview of the innovation partnership "iHELP" in the United Kingdom. Although the United Kingdom will not be an EU member in the future, this project was chosen because at the time of the tendering, the UK was a full member. This project was selected by the author because of the possible function as a role model for similar projects concerning social benefits for society. In this case, the project strives for economical as well as social sustainability on a long term basis.

First, under 5.4.1 Objective of the project, the project will be introduced and further details will be given, followed by 5.4.2 Definition of „chronic pain“. Then, in 5.4.3, the Process will be explained and in 5.4.4 Experience and Strategy Approaches will be given. All documents are published online.⁶

5.2.1 Objective of the project

Contracting authority is the NHS Midlands and Lancashire Commissioning Support Unit on behalf of West Lancashire Clinical Commissioning Group (CCG), which is funded by the Department of Health to plan and pay for local health services (NHS, 2017, 6). Around 112,000 patients are dependent on NHS West Lancashire CCG's primary and secondary health care (NHS, 2017, 1).

In 2017, around £3.1 million (3.6 Euro) are spent on chronic pain: £2 million in primary care, mostly for Pregabalin⁷ (approximately £800k), strong opioids and other analgesics and £1.1 million in secondary care (outpatient attendances, inpatient procedures, and day cases) (NHS, 2017a, 1).

Aim of the procurement process is to meet the chronic pain patient's need by *“providing advice around physical activity, nutritional and psychological needs and the use of tools and technology to help them self manage the pain they are experiencing”* (NHS, 2017a, 4). This will be realized by the establishment and operation of a single point of access to *“contribute to the triple aim of improved population health, high quality holistic care for patients and reduced cost”* (NHS, 2017a, 4). Only appropriate referrals are forwarded to secondary care, so the secondary care centres will be relieved of the burden of too many patients (NHS, 2017, 3). The service of the primary care will be provided for residents aged 16 or above and are registered with a practice within West Lancashire CCG (NHS, 2017a, 11).

Additional to this goal, the project aims to procure not just state of the art technology but newest technology, which may include but not be limited to Virtual Reality (NHS, 2017a, 9). According to the NHS (2017a, 6), the overall principle is the collaboration with successful supplier(s) to achieve the best result before entering a three-year contract with an option for two further years.

⁶ <https://www.contractsfinder.service.gov.uk/Notice/ae02ce71-5a18-4e0c-b2c7-628868a9b688>

⁷ Pregabalin is an anti-epileptic drug which works by slowing down impulses in the brain that cause seizures. It also affects chemicals in the brain that send pain signals across the nervous system (Cerner Multum Inc., 2018).

The procurement project has to be in line with the National Health Service Regulations 13. These regulations include provision of complimentary services to existing services, ensuring the maintenance of the national quality requirements and improvement of efficiency in the provision of the services (NHS, 2017, 6f). As an innovation partnership aims at innovative results, the technology used should be *“appropriate technology for self-help and management”* and *“for recording and monitoring”* (NHS, 2017a, 9).

The supplier will not only be responsible for prescription of drugs (NHS, 2017a, 5) but has also to ensure several obligations concerning diagnostics to fulfil the procurer’s need. Explicitly, these obligations concern

- the access of the diagnostic’s results investigations in the primary care to avoid duplication,
- the provision of 24-hour turnaround of electronic reporting with images and
- the provision of integrated access to psychological support (NHS, 2017, 5f).

Further, the service delivered should provide the best possible patient experience (NHS, 2017a, 6):

- *“A convenient local service commensurate with population need, patient choice and informed by equality impact assessment;*
- *Pain managed in the community as far as possible;*
- *A seamless holistic service meeting patient’s needs;*
- *Patients to be able to self-refer up to one year after discharge;*
- *Patient education and solution focused shared decision making so that everyone feels fully informed about their condition and treatment options;*
- *A positive patient experience in a welcoming and friendly environment;*
- *High levels of patient satisfaction with >80% people recommending the service to family and friends;*
- *Levels of service ensuring low drop-out and DNA rates and increased patient compliance;*
- *The Supplier should also consider patient experience gathered by the Commissioner from chronic pain patients to date.”*

In total the value of the contract includes a budget from £2.1 million to £4.3 million (€ 2.4 million – € 5 million) (NHS, 2017b). A minimum level of £463,000 (€528,000) was identified as expected savings per year; the price decrease of the red drug “Pregabalin”

is not considered in this figure⁸ (NHS, 2017a, 7-8). The savings will occur due to the excellent value for money through (NHS, 2017a, 6)

- *“Reduction in pain management prescribing;*
- *Cost reductions in pain relief medication;*
- *Cost reductions in Pain Management secondary care attendances;*
- *High quality procurement of alternative packages of care.”*

Costs, incurred by all stages of this procurement, shall be covered by all potential suppliers including relevant organisations, funders and advisors (NHS, 2017, 17).

The publishing date started in September 2017 up until the closing date in October 2017 and the contract started on 28 March 2018. End of the contract will be 28 August 2025. The contracting authority retained the right to vary the process to *“support continued competition, avoid unnecessary costs associated with the PQQ [comm. author: Pre-qualification questionnaire] and adhere to technical, legal or commercial guidance issues subsequent to the PQQ”* (NHS, 2017, 17). The following timetable (Tab.3) sets out the indicative timetable for this procurement (NHS, 2017, 11).

Table 4: Indicative timetable for procurement iHELP (author’s representation after NHS, 2017, 11)

Milestones	Timetable
Date of posting of contract	21/9/2017
Date PQQ available to potential suppliers	21/9/2017
Closing date and time for potential suppliers to request PQQ documents	24/10/2017 13:00
Closing date and time for the potential suppliers to submit their response (“the deadline”)	24/10/2017 14:00
Clarification (if required)	7/11/2017
Notification of decision for potential suppliers to proceed or not proceed to phase 1 of the tender process	29/11/2017
Anticipated phase 1 contract award date	27/3/2017
Commencement of contract	28/3/2018

⁸ In August 2017 Pregabalin got introduced in the Category M drug tariff section which resulted in a significant Pregabalin price reduction. Approximately £30k of West Lancashire CCG’s annual expenditure should decrease (NHS, 2017a, 1) which is *“still a major issue with the underlying level of Pregabalin prescribing which the service would be expected to address”* (NHS, 2017a, 2). Further, the NHS says that *“there is no certainty that this price reduction will be sustained at such a significant level in the long term”* (NHS, 2017a, 2).

5.2.2 Definition

According to the NHS (2017a, 1, after British Pain Society, 2007), chronic pain is defined as *“pain that persists beyond the point at which healing would be expected to be completed (3-6 months) or that which occurs in disease processes in which healing does not take place”*. This definition does not separate between “identifiable and treatable physical conditions” and “unidentifiable causes”.

In June 2016, circa 28 million adults are affected by chronic pain in the UK, which equals between one third and one half of the population. Due to the ageing population this figure is likely to increase in the future (NHS, 2017a, 1).

5.2.3 Process

The process of the procurement project “iHELP” was divided into three phases, namely

- Phase 1 “The design contract”, which lasts three months,
- Phase 2 “The pilot contract”, which lasts two years and
- Phase 3 “The delivery contract”, which last up to five plus additional possible two years (NHS, 2017a, 7).

Phase 1 – The design contract

As already mentioned the design phase will last for three months and will be followed by the Pre-Qualification Questionnaire⁹ (PQQ) including questions on the supplier’s technical and professional ability. In the design phase there will be two providers and one design will be selected to be used for the pilot phase (NHS, 2017a, 9).

The CCG aims to protect the suppliers from financial risk during phase 1 and phase 2. Therefore, the CCG provides 50% of the Phase 1 tendered value and pays the design stage outputs. The remaining 50% of the Phase 1 tendered value will be paid if the final design phase outputs meet all Phase 1 minimum requirements (NHS, 2017a, 9). The Commissioner (NHS, 2017a, 9) will provide feedback to bidders to support them in achieving all minimum requirements.

⁹ The PQQ provides an *“overview of the procurement; details of how the PQQ responses will be evaluated; a list of the Procurement rules that all Potential Suppliers must comply with; instructions for Potential Suppliers on how to complete the PQQ”* (NHS, 2017, 8). It will be in accordance with the EU treaty principles and has therefore been made available to all potential suppliers who have expressed an interest. The PQQ lays down the process of the phases and what the procedure will look like (NHS, 2017, 8).

The costs for the service are new and are based on various assumptions which will be defined during phase 1 and further during negotiations phases during phase 2. Currently they are best estimates based on available information and aim to support the design of the service (NHS, 2017a, 7).

The NHS expects a total minimum saving per year of £463,000 excluding costs of alternative packages. Fewer savings will be seen as a failure in the design of the system. In terms of savings, costs of the new service should be below the costs of treating patients under the traditional model (NHS, 2017a, 8).

Phase 2 – The pilot contract

During phase 2, the successful bidder's expenditures will be covered by 24 monthly payments. Each month, the bidder will get the reimbursement through submitting an invoice to the Commissioner (NHS, 2017a, 9).

Phase 3 –The delivery contract

Following from the pilot phase the delivery phase takes up to five years with up to three plus additional possible two years (NHS, 2017a, 7). From this point on further risk may be transferred to the supplier and therefore the CCG will open a third party care budget to the bidder. Payments made will be simultaneously to phase 2 or be adapted to reflect any devolved budgets (NHS, 2017a, 9).

5.2.4 Experiences and Strategy Approaches

The iHELP project's goal was threefold, aiming at an improved population health, high quality holistic care for patients and reduced costs (NHS, 2017a, 4). Therefore, the procurement objectives focus on (NHS, 2017, 5):

- *“Stimulation of the provider market to provide competition to meet demand and secure required clinical, health and well-being outcomes.*
- *Applying procurement skills, expertise, processes and methodologies that ensure robust, viable and value for money contracts.*
- *Ensuring procurement processes are effective, transparent and equitable.*
- *Continuously reviewing existing contracts, for both clinical and non-clinical services, to ensure that they deliver in accordance with quality requirements and offer maximum value for money and demonstrate continuous improvement in the quality and range of services on offer.*

- *Working with other CCGs to ensure that buying power and economies of scale are maximised through shared procurement processes.*
- *Conducting service reviews and market analysis and driving the redesign, innovation and delivery of services through new contracts where public and other feedback suggests that changes are required.”*

Exclusion criteria are also of significant importance to improve the best outcome procured, e.g. symptoms of acute pain, palliative pain, post-operative or –traumatic complications, etc. (NHS, 2017a, 12).

6. Conclusion & Recommendations

As mentioned in the introduction public procurers as well as the private market are overwhelmed with frameworks, guidelines and policies concerning public tenders. Implementing the innovation partnership is one step ahead to drive innovation and sustainability in the European Union: The new tender procedure includes the contract procedure which is a new approach of the EU to foster innovation and to strengthen the Europe 2020 strategy. Purpose of the innovation partnership is to drive sustainability towards a smart, sustainable and inclusive growth to solve societal challenges.

It has to be emphasized that aim of this procedure is the intent to have a whole procedure for developing and procuring an innovative product, service or works that is not available at the market. This is the biggest difference compared to usual tender procedures. But still, there is a long way to go and first experiences show that some hesitations and uncertainties are still in place.

This master thesis dealt with the scope of the domestic legislation in Austria:

“Is the Innovation Partnership a way for more sustainable innovations in public procurement?”

To answer this question three sub-questions were formed:

- (1) How is the scope of the EU Directive 2014/24/EU applied in the Austrian domestic law?*
- (2) How could the implementation of the EU Directive 2014/24/EU lead to more sustainable innovations within the Austrian public sector?*
- (3) Which lessons learned can be derived from international first experiences?*

Below the research question will be answered and summarized to derive recommendations for Austrian public procurer:

How is the scope of the EU Directive 2014/24/EU applied in the Austrian domestic law?

Several benefits may arise due to the application of the EU Directive 2014/24/EU like the elimination of a second tender completion due to the combination of R&D and supply. This simplification may increase the supplier's willingness to participate in a public tender and decreases the supplier's risk at the same time.

But unfortunately, this can also be seen as a disadvantage due to the limited partners who are able to participate both phases of the procurement project. It is very likely that start-ups will be excluded to attend to their incapability to manage large scale supply.

Following a summary of the new characteristics shall be given:

- a) The negotiated procedure in the preparation of an innovation partnership takes place with prior notice.
- b) The negotiation phase - with at least one round – is possible with one or several producers. The number of applicants gets reduced after each round if these applicants do not fulfil the criteria.
- c) The handling of the innovation partnership is divided in separate phases. Intermediate targets need to be attained by the partners and further, payment of the remuneration in appropriate instalments shall be set per phase.
- d) After the development no separate tender procedure is necessary. The procurement is part of the innovation partnership but still thresholds for the level of performance and costs have to be defined. Applicants, who are not valid, do not get an invitation and are therefore not allowed to submit an offer.
- e) One tender covers all stages and phases.

According to Kuchar et al. (s.a), the innovation partnership can be seen as a market pull mechanism for R&D services which holds potential for complex procurement projects. It is a matter of intellectual property and time if the market can provide such solutions.

How could the implementation of the EU Directive 2014/24/EU lead to more sustainable innovations within the Austrian public sector?

According to leading legal experts the innovation partnership does not provide new regulations and therefore cannot solve current issues with other instruments but slightly upgrades them (Interview partner 1, 2018, translated by the author; Interview partner 3, 2018). Nevertheless, certainly the innovation partnership is "*signal and impulse for*

public authorities” (Interview partner 3, 2018) and raises awareness towards the possibility of such constructions (Interview partner 1, 2018, translated by the author). Several benefits more may arise like the elimination of a second tender completion due to the combination of R&D and supply. This may lead to an increase of the industry’s willingness to participate in a public tender due to the decrease of supplier’s risk concerning losses of resources (Interview partner 3, 2018). Another benefit is that it can be expected that control authorities may be more accommodating in the scope of their interpretations (Interview partner 1, 2018).

One disadvantage according to interview partner 3 (2018) is that the amount of possible partner is limited due to the rather limited number of suppliers who are able to deliver both, R&D and supply. Hence, the contracting authority’s margin of using comparative advantages of companies for R&D first and then the large scale supply is limited (Interview partner 3, 2018). So, the *“powers (of a consortium) would be shifted toward bigger player”* (Interview partner 3, 2018). They might have *“well-established production capabilities but often (comparatively) smaller innovative capacities”* than start-ups might provide (Interview partner 3, 2018).

Which lessons learned can be derived from international first experiences

Several lessons learned can be derived from the projects described in this master thesis:

- a) In a first step, procurers should be made aware that the innovation partnership might be easier than expected.
- b) In a second step, the procurers should align the procedures and approaches with the legal situation in their country. Since some member states have implemented the directive already, other countries, like Austria, may examine the implementations and use them as role models. Therefore, public procurers should build a network within the EU member states to share knowledge and expertise. Further, experiences should get published and provided to the public and interested parties. Several approaches might be possible like the publication of all tender documents including further information concerning frequently asked questions (see NHS), the participation at events and panel discussions (see NAH.SH) and through storytelling in workshops. In 2019 an international training for public procurers will take place in Austria, funded by the European Commission. There the innovation partnership will be part of the agenda. Due to confidential reasons no further information is available at the moment.

- c) In a third step, the possibilities and the “freedom” of the innovation partnership shall be precisely used for innovative aspects of a procurement project. The whole project does not necessarily need to be an innovation partnership; other – standardized – aspects should further be procured in the usual ways.
- d) For the procedure itself, drawing on the expertise of external professionals can be very helpful in the regard with technical and legal aspects. Only the market itself knows which solution fits the best and may provide advanced or improved products. The outcome will be – compared to standard procurement - preferable, since not only possibilities in the market are screened, but competition is fostered and the price hence lowered. Hence, companies should be part of the process as well.

Outlook

The big question is still if the innovation partnership is a way to a more sustainable and innovative public sector. Austrian experts as well as international procurers are not convinced that the innovation partnership might be best approach but see a lot of potential.

So, this question has to be kept still unanswered at this moment but there are lots of signals indicating the right direction. The author herself agrees with the experts concerning the biggest advantage: The innovation partnership will raise awareness within the public sector concerning innovation and sustainability and broadens the range of available tools. Especially right now is the perfect timing for a paradigm shift from the principle of cheapest bidder to the principle of best price. The Austrian government states several times in the government program 2017-2022 that PPPI should be expanded by 2% of the purchasing volume of public procurers at the federal level (Regierungsprogramm, 2017, 135). The aim is twofold: Austria should be a role model in procuring in an innovative and sustainable way and should also be the benchmark for the development of new technologies (Regierungsprogramm, 2017, 79). Therefore, it is obviously that it is of utmost importance to follow innovative approaches to gain the best outcome possible.

As already mentioned it is unclear if these goals will be achieved in the future. Therefore, the author recommends an evaluation of the progress in the future to derive lessons learned and make necessary adjustments.

References

Authority for the Supervision of Public Contracts (2010): "The comparative survey on Public Procurement Systems across the PPN", Rome.

Blind, K., Gauch, S., et al. (2012): „Public Innovation - Innovationen und Innovationsmanagement in der öffentlichen Verwaltung in Deutschland und Europa“ Eds.: Frauenhofer Fokus, 32, Berlin.

Bundesverfassung (2015): [www.ris.bka.gv.at](http://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10000138), accessed by 19/7/2017, <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10000138>.

Cerner Multum Inc. (2018): „Lyrica. What is Lyrica“, accessed by April 21, 2018: <https://www.drugs.com/lyrica.html>.

Commission of the European Communities (2007): „Vorkommerzielle Auftragsvergabe: Innovationsförderung zur Sicherung tragfähiger und hochwertiger öffentlicher Dienste in Europa“, KOM(2007) 799 endgültig, 12-13, Brussels.

Commission of the European Communities (2008): "Public procurement for a better environment", COM(2008) 400 final, 3, Brussels.

Community of European Railway and Infrastructure Companies (2016): "The Voice of European Railways", accessed by 31/3/2018, <http://www.cer.be/about-us/who-we-are>.

De Vries, H.A., Bekkers, V.J.J.M., Tummers, L.G. (2014): "Innovation in the Public Sector: A Systematic Review and Future Research Agenda". Speyer: EGPA conference, 6, Rotterdam.

Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC Text with EEA relevance, 2-138, Brussels.

Entwurf - Bundesgesetz, mit dem ein Bundesgesetz über die Vergabe von Aufträgen (Bundesvergabegesetz 2017) erlassen wird und das Bundesvergabegesetz 2017 sowie das Bundesvergabegesetz Verteidigung und Sicherheit 2012 geändert werden (Vergaberechtsreformgesetz 2017).

Edquist, C., Zabala-Iturriagagoitia, Jon Mikel (2012): "Why Pre-Commercial Procurement is not Innovation Procurement," Papers in Innovation Studies 2012/11, Lund University, CIRCLE - Center for Innovation, Research and Competences in the Learning Economy, 8, accessed by 11/6/2018, https://ideas.repec.org/p/hhs/lucirc/2012_011.html.

European Commission (2006): "Pre-commercial Procurement. Public sector needs as a driver of innovation", 6.

European Commission (2007): "IP/07/1962 - Commission to promote clean and energy efficient vehicles", 1, Brussels, accessed by 25/4/2018, http://europa.eu/rapid/press-release_IP-07-1962_en.htm?locale=en.

European Commission (2010): "Green Public Procurement", Brochure, 2, accessed by 16/1/2018, <http://ec.europa.eu/environment/gpp/pdf/brochure.pdf>.

European Commission - DG Enterprise & Industry (2014a): "Public Procurement as a Driver of Innovation in SMEs and the public sector", Brussels: European Union.

European Commission (2014b): "Revision of Public procurement Directives - Frequently Asked Questions", Brussels.

European Commission (2014c): "Horizon 2020 – Work Programme 2014-2015 - General Annexes", 3, accessed by 20/1/2018,
http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-e-inproc_en.pdf.

European Commission (2014d): "EU Budget 2014 Financial Report - Foreword", accessed by 5/3/2017,
http://ec.europa.eu/budget/financialreport/2014/foreword/index_en.html.

European Commission (2014e): "EU Budget 2014 Financial Report", accessed by April, 9, 2018,
http://ec.europa.eu/budget/financialreport/2014/lib/financial_report_2014_en.pdf.

European Commission (2014f): "Procurement And Grants for European Union external actions - A practical guide", 36.

European Commission (2015): <http://ec.europa.eu/>, accessed by 11/6/2018,
<http://ec.europa.eu/digital-agenda/en/pre-commercial-procurement>.

European Commission (2016): "A European Strategy for Low-Emission Mobility", COM(2016) 501 final, 1, Brussels, accessed by 31/3/2018,
<https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52016DC0501>.

European Commission (2017a): "Digital Single Market - Pre-Commercial Procurement", accessed by 20/7/2017, 2017, http://ec.europa.eu/growth/single-market/public-procurement/infringements/remedies/index_en.htm.

European Commission (2017b): "Public Procurement", accessed by March 1, 2017,
https://ec.europa.eu/growth/single-market/public-procurement_en.

European Commission (2017c): "Making Public Procurement work in and for Europe", COM(2017) 572 final, 4, Strasbourg.

European Commission (2017d): "Increasing the Impact of Public Investment Through Procurement", 1.

European Union (2010): "Free movement of goods", Luxembourg: Publications Office of the European Union.

Eßig, M. (2008), „Öffentliche Beschaffung – Bedeutung und Ansatzpunkte zur konzeptionellen Weiterentwicklung. In E. u. Bundesverband Materialwirtschaft, Best Practice in Einkauf und Logistik“, 90, Wiesbaden.

Federal Ministry of Agriculture, Forestry, Environment and Water Management (2011): "Austrian Action Plan for Sustainable Public Procurement", 5, accessed by 17/2/2018,
http://www.nachhaltigebeschaffung.at/sites/default/files/nabe2011_17_engl_kurzfassung.pdf.

Federal Ministry of Agriculture, Forestry, Environment and Water Management (2010): "Österreichischer Aktionsplan zur nachhaltigen öffentlichen Beschaffung - TEIL I", 8-9, accessed by February 17, 2018, <http://www.nachhaltigebeschaffung.at/sites/default/files/Aktionsplan%20nachhaltige%20Beschaffung%20Teil%20I.pdf> .

Haskilic, N. (2012), „Die zentralen Beschaffungsstellen“, 58.

Innovationsfördernde öffentliche Beschaffung (2012): „Leitkonzept für eine innovationsfördernde öffentliche Beschaffung (IÖB) in Österreich“, 2, Ed.: Bundesministerium für Verkehr, Innovation und Technologie (BMVIT) und Bundesministerium für Wirtschaft, Familie und Jugend (BMWFJ).

Innovationsfördernde öffentliche Beschaffung (2015): „IÖB Leitfaden - Rechtliche Rahmenbedingungen zur Umsetzung von innovationsfördernder öffentlicher Beschaffung!“, Ed.: Innovationsfördernde öffentliche Beschaffung und Österreichische Förderungsgesellschaft, 6-8.

International Union of Railways (2014): "Zero Carbon Railways – Final Report", 14.

Knabl, Angelika (2015): "Organisational prerequisites for successful PPI – A case study on public procurement of innovation in Europe", Vienna University of Economics and Business Administration, Institute of Public Management and Governance, 9-28.

Kuchar, B. et al. (s.a.): "Die Innovationspartnerschaft – tatsächliche Chance auf innovative Leistung?", Vienna, accessed by 11/05/2018, <http://www.kwr.at/up2date/2017/03/20/die-innovationspartnerschaft-tatsaechliche-chance-auf-innovative-leistung/> .

Marin, H./Bermejo, L. (2015): "External sources for innovation in public organisation", The Service Industries Journal, 35(13), 17.

Moschitz, S. (2008): www.sustainable-procurement.org, 13, accessed by 19/7/2017, www.sustainable-procurement.org.

Nahverkehrsverbund Schleswig-Holstein GmbH (2016): „Vergabeunterlagen Teil II, Verfahrensablauf Innovative Triebzüge für Schleswig-Holstein“.

NHS Midlands and Lancashire Commissioning Support Unit (2017): "Pre-qualification questionnaire – For iHELP Community Pain Management on behalf of West Lancashire Clinical Commissioning Group – Reference L16-24", 1-17, Preston.

NHS Midlands and Lancashire Commissioning Support Unit (2017a): "Appendix A - iHELP minimum requirements whole project", 1-11, Preston.

NHS Midlands and Lancashire Commissioning Support Unit (2017b): "NHS West Lancashire CCG iHELP Community Pain Management", accessed by 21/4/2018, <https://www.contractsfinder.service.gov.uk/Notice/ae02ce71-5a18-4e0c-b2c7-628868a9b688>

OECD (2004): "Can cars come clean? Strategies for low-emission vehicles", 25-26, Paris.

OECD (2007): "Bribery in Public Procurement: Methods, actors and counter-measures", 19, accessed by 2/3/2017, <http://www.oecd.org/daf/anti-bribery/anti-briberyconvention/44956834.pdf>.

OECD (2016a), "Preventing corruption in Public Procurement", 5, accessed by 2/3/2017, <http://www.oecd.org/gov/ethics/Corruption-in-Public-Procurement-Brochure.pdf>.

Öko-Institut e.V.(2009): „ÖPNV und Klimaschutz in Schleswig-Holstein - Endbericht des Öko-Instituts im Auftrag der LVS Schleswig-Holstein Landesweite Verkehrsservicegesellschaft mbH“, 5-40, Berlin.

Regierungsprogramm (2017): „Zusammen. Für unser Österreich. Regierungsprogramm 2017-2022“, accessed by 31/5/2018, https://www.wienerzeitung.at/em/daten/wzo/2017/12/16/171216_1614_regierungsprogramm.pdf.

Richtlinie 2014/24/EU des Europäischen Parlaments und des Rates vom 26. Februar 2014 über die öffentliche Auftragsvergabe und zur Aufhebung der Richtlinie 2004/18/EG Text von Bedeutung für den EWR.

Weis, B. X. (2012): „Praxishandbuch Innovation - Leitfaden für Erfinder, Entscheider und Unternehmen“, Stuttgart: Springer Gabler.

Your Europe (2016): "Rules & procedures", accessed by 28/2/2017, http://europa.eu/youreurope/business/public-tenders/rules-procedures/index_en.htm.

Secondary Literature:

Brackmann, S. C., & Verlinden-Bijlsma, J. C. (2011): „Praktijkboek Aanbesteden“, 2nd ed., 17, The Hague, The Netherlands: Sdu.

Gohlisch, G. (2009): „Fahr- und Verkehrsleistung sowie Emissionen des Verkehrs auf Basis der TREMOD-Version 4.17: Persönliche Mitteilungen vom 26.1.2009“.

Intraplan Consult GmbH (2008): „Perspektive ÖPNV in Schleswig-Holstein: Verkehrsprognosen unter besonderer Berücksichtigung des demographischen Wandels. Abschlussbericht im Auftrag der LVS und der HVV.“, Hrsg.: München.

Öko-Institut e.V (Hrsg): Fritsche, U., Hochfeld, C.; Jens et al (2008): „GEMIS 4.5 - Gesamt-Emissions-Modell Integrierter Systeme. Umwelt- und Kostenanalyse von Energie-, Transport- und Stoffsystemen. EDV-Modell“, Darmstadt/Berlin.

Research Unit Consip (2007): "Questionnaire on Central Purchasing Bodies Benchmarking - A look", Brussels.

Statistisches Amt für Hamburg und Schleswig-Holstein (2008): „Umweltökonomische Gesamtrechnungen: Treibhausgasemissionen in Schleswig-Holstein 2005“, Hrsg.: Hamburg/Kiel.

List of tables

Table 1: Categorization of the common types of innovation and their characteristics (author's representation after Bekkers et al., 2014, 6)	8
Table 2: Parameter of regional rail transport in Schleswig-Holstein 2005 (author's representation based on Öko-Institut, 2009, 16 after LVS 2009, Intraplan 2008a)	35
Table 3: Factor for the conversion of energy demands of trains in CO ₂ and CO ₂ emission equivalents for 2005 and 2025 (author's representation based on Öko-Institut, 2009, 11 after TREMOD 2009)	36
Table 4: Indicative timetable for procurement iHELP (author's representation after NHS, 2017, 11)	42

List of figures

Figure 1: Stages of a PCP (EC, 2015).....	17
Figure 2: Procedure of an innovation partnership (author's representation, 2018)	27

Appendices

Interview partner 1 - Bundesbeschaffung GmbH

Block I - Innovation Partnership in general:

- (1) Please clarify the most important difference(s) between an Innovation Partnership and a previous award procedure project within
- an award procedure in the narrower sense;
 - as well as in the freedom in the contractual arrangements given.

a) Technically in Austria there is no award procedure called Innovation Partnership that could be compared with pre-existing procedures. The regulations on the implementation of an Innovation Partnership do not provide a distinct procedure that is drafted in the likeness of a negotiated procedure – as the European directive does – but requires the contracting authority to actually conduct a negotiated procedure. There are only a few special regulations applicable to a negotiated procedure when used for an Innovation Partnership. So these are the only differences.

These differences are:

1. tender documents have to address a number of specific aspects explicitly listed in the law
2. Negotiations are mandatory – while in standard procedures it is possible to conclude the procedure based on the initial offers
3. It's possible to reduce the participants down to one during the negotiations – while in standard procedures you have to retain at least three to enable some sort of competitive setting
4. It's possible to award multiple contracts to multiple economic operators to be executed concurrently – in standard procedures only one economic operator can be picked

Number One isn't much of a difference since it is just an explicit application of the general rule that criteria have to be derived from the necessities of the specific subject matter of the procurement procedure. When research and development services are an important part of a tender it is pretty much a given, that these services have to be taken into consideration when drafting criteria and intellectual property rights have to be regulated in the contract.

Number Two is actually a restriction compared to the standard procedure – so not a bonus for the new instrument. It isn't really important since the negotiated procedure isn't even eligible if negotiations aren't expected to be a necessity. So even if it's possible to skip negotiations it is not very likely - especially if there is a complex and innovative subject matter.

Number Three is a bonus, but once again not a dreadfully important one. While it might save time and effort by eliminating concurrent negotiations with two additional economic operators it also limits the options available to the contracting authority and the prices may rise if there is no longer any competition.

So in my opinion number four is the only important difference, because the possibility to postpone the final decision to a point long after the award procedure can impact the overall results greatly.

Since it is explicitly an exception to the rule this means conversely that in a regular negotiated procedure it is not possible to pick more than one tenderer. This is relevant since up until now there was no regulation explicitly addressing this so one might have

argued for it to be viable under the old legal regulations. Now, however, it's an exclusive advantage to the Innovation Partnership.

b)

Procurement law includes barely any restrictions or regulations regarding the drafting of contracts. So pretty much everything legal under contractual law can be used in public procurement as well.

When it comes to the Innovation Partnership the law has a few explicit rules what needs to be regulated in the contract. That is actually a (minor) restriction, since it constitutes additional restrictions on what you have to regulate and what you can deliberately leave out. Since it's mostly topics you should address either way it is of minor consequences.

On the other hand there is no explicit exception from the general restrictions.

Even though procurement imposes little restrictions when drafting the contract, there is very little leeway when it comes to changing them afterwards. Unfortunately there is no explicit exception to this principle in regard to Innovation Partnerships. So this remains the major obstacle for the procurement of goods and services that are yet to be developed because it's hard to adapt the contract to the results of the research or development phase.

(2) Which aspects of an Innovation Partnership were already possible to reach and which methods were used before?

Aufgrund des Gestaltungsspielraumes im Vertragsrecht war es bereits bisher möglich, mehrere aufeinander aufbauende Leistungen in einem gemeinsamen Vertrag zu regeln. Es steht auch vergaberechtlich dem Auftraggeber frei, mehrere (Teil)leistungen eines Vorhabens getrennt oder gemeinsam vergibt.

Derartige Verträge waren selten, wurden aber im Prinzip genauso aufgesetzt wie jetzt auch die Innovationspartnerschaft: durch Definition mehrerer aufeinander aufbauender Phasen mit gesonderter Festlegung von durchzuführenden Tätigkeiten und Zielen. Ebenso war eine Möglichkeit vorgesehen das Projekt abubrechen, wenn eine Phase keine zufriedenstellenden Ergebnisse gebracht hat.

Wofür bisher keine rechtliche Basis vorhanden war ist der Abschluss paralleler Verträge mit mehreren Auftragnehmern. Insbesondere wenn die Performance eines Vertragspartners sich auf die Verträge der anderen auswirkt (durch Vergleich der Wertungen am Ende einer Phase).

(3) What particular aspects have to be specifically taken into account?

Da die nachträgliche Änderung von Verträgen im Vergaberecht sehr stark eingeschränkt wird und die Ergebnisse der Forschung und Entwicklung im Vorfeld nicht feststehen, muss man vor allem auf die Sicherstellung der Flexibilität im Vertrag achten. Dazu benötigt es eine funktionale Leistungsbeschreibung und Klauseln für Vertragsänderungen, basierend auf den Ergebnissen einer Phase.

Block II - Drafting of an Innovation Partnership:

(4) How does the drafting of a contract with uncertain outcome look like?

Bei einer konstruktiven Leistungsbeschreibung wird der Ablauf einer Dienstleistung oder die Zusammensetzung einer Ware konkret beschrieben. Bei der funktionalen Leistungsbeschreibung werden seitens des Auftraggebers nur die zu erreichenden Ziele definiert und es obliegt dem Bieter, in seinem Angebot eine Leistung zu präsentieren, die diese Ziele tatsächlich erreichen kann.

Bei einem Vertrag für erst zu entwickelnde Leistungen wird dieses Prinzip nochmal gesteigert, da der Auftragnehmer nicht bereits im Angebot, sondern erst am Ende des Vertrages eine fertige Lösung präsentiert.

(5) Who bears the risk of an Innovation Partnership? The contracting authority or the supplier? Why?

Da es kaum Vorgaben gibt, wie die Risikoverteilung auszusehen hat, ist der Auftraggeber bei der Gestaltung der Unterlagen relativ frei. Es wäre möglich den Vertrag so zu gestalten, dass der Auftragnehmer in der Entwicklungsphase seine Forschungs- und Entwicklungsleistungen voll abgegolten bekommt. In diesem Fall hätte er nahezu kein Risiko, weil sein Aufwand auch bei Scheitern des Projektes abgegolten wird.

Umgekehrt wäre es denkbar, dass der Auftraggeber die Entwicklungsphase kaum honoriert und erst bei der Erbringung der fertig entwickelten Leistung substanzielle Zahlungen erfolgen.

Wesentlich ist, dass die Risiken und Chancen in einem sinnvollen Zusammenhang stehen sollten. Insbesondere die Kosten für die Forschungs- und Entwicklungstätigkeiten einerseits und die Rechte an den Ergebnissen andererseits.

(6) Is it valid to express reasons for exclusion and if so, to which extent?

a. Please name possible reasons for exclusion.

Die zulässigen Ausschlussgründe im Vergabeverfahren sind im Wesentlichen die gleichen wie bei anderen Verfahren.

Ausschlussgründe im Rahmen der Vertragserfüllung sind grundsätzlich möglich, müssen im Vertrag aber geregelt werden.

Das Gesetz regelt, dass am Ende einer Phase die Ergebnisse zu bewerten sind und das zur Kündigung von Verträgen führen kann.

Es ergibt sich aus dieser Regelung nicht klar, ob eine Auflösung daher NUR in einem solchen Fall aufgrund schlechter Bewertung zulässig sein soll, oder ob darüber hinaus auch andere Kündigungsmöglichkeiten geregelt werden.

Dem Wortlaut nach geht es in der Regelung um mögliche Konsequenzen der Bewertung, nicht eine (abschließende) Regelung von Kündigungsmöglichkeiten. Da die Zulässigkeit von Kündigungsmöglichkeiten primär kein vergaberechtliches Thema ist, kann man davon ausgehen, dass auch andere Kündigungsklauseln zulässig sind. Insbesondere wäre nach allgemeinem Vertragsrecht auch ein jederzeitiges Kündigungsrecht (unter Einhaltung einer Frist) ohne Begründung möglich.

Es gibt jedoch zwei Einschränkungen, hinsichtlich der Zulässigkeit solcher Auflösungsgründe:

1. Sie dürfen nicht gröblich benachteiligend sein. Daher muss insbesondere geregelt werden, wie mit bereits erbrachten Leistungsteilen zum Zeitpunkt der Kündigung umgegangen wird. Sowohl hinsichtlich Entgelt als auch hinsichtlich

Rechten.

2. Sofern parallele Verträge mit mehreren Anbietern bestehen, muss das Gleichbehandlungsgebot berücksichtigt werden. Der Entscheidungsmaßstab muss für alle ident sein.

Daher wird es in der Regel nicht sinnvoll sein eine Kündigung vor Abschluss einer klar abgegrenzten Phase vorzusehen.

Die Möglichkeit einer unbegründeten Kündigung am Ende einer Phase wird aber wohl zulässig und sinnvoll sein. Das ermöglicht einen Ausstieg aus dem Projekt, wenn sich herausstellt, dass keine sinnvollen Ergebnisse (mehr) zu erwarten sind. Das wäre auch bei parallelen Verträgen rechtfertigen, sofern alle Verträge gekündigt werden. Einzelne Verträge ohne Begründung aufzulösen würde dem Gleichbehandlungsgebot widersprechen.

Block III - Innovation Partnership in action:

- (7) How and why did you choose the Innovation Partnership as the best instrument for your procurement project?

Bisher wurde die IP noch nie eingesetzt.

- (8) How did the prior process look like?

- a. Which instruments preceded the procurement process?
- b. Did you also use other tender procedures in combination with the Innovation Partnership?

a) Verhandlungsverfahren nach vorheriger Bekanntmachung bzw. eine Direktvergabe nach vorheriger Bekanntmachung in Anlehnung an ein Verhandlungsverfahren.

Der Vertrag war in mehrere Phasen gegliedert, wobei nach Abschluss jeder Phase eine Zwischenbewertung vorgesehen war und der Auftraggeber die Möglichkeit hatte, das Projekt einzustellen. Die Erbringung von Leistungen einer Folgephase war daher immer erst nach ausdrücklicher Freigabe der vorangegangenen Phase und Entscheidung über die Auflösung zulässig.

Die Leistung war funktional beschrieben und die Einarbeitung der Ergebnisse der vorangegangenen Phase jeweils ausdrücklich als Leistungsbestandteil definiert.

b) Nein.

- (9) How did you know that the current market cannot meet your need?

- a. How did you design the market research?

In den bisherigen, der IP ähnlichen, Fällen, ging es um ganzheitliche Unternehmenskonzepte, die mehrere Aspekte der Unternehmensführung berücksichtigen sollten. Dafür gab es zwar auf dem Markt mehrere bereits etablierte Ansätze und Maßnahmen, es war jedoch erforderlich diese Ansätze für den Betrieb des Auftraggebers zu optimieren und daher die richtige Mischung aus Maßnahmen zu finden. Dazu war Erhebung und Analyse der Bedürfnisse vor Ort Teil der Leistung. Der Innovationsgrad ist bei einer solchen Form des Customizing zwar eher gering, allerdings lässt sich relativ sicher ausschließen, dass eine derart maßgeschneiderte Lösung auf dem Markt bereits vorhanden ist.

- (10) Did some unexpected problems or delays occur?
- If so, which problems/delays occurred before starting the procurement project? Please name the decisive reasons.
 - If so, which problems/delays occurred while the procurement project was ongoing?

Nein, die Probleme waren alle erwartet. Primär ging es um die Schwierigkeit der Definition der Phasen und Vertragsziele am Ende des Projektes, da die Entwicklung bis dahin schwer vorherzusagen sind.
Das Projekt wurde inzwischen eingestellt, wobei aber externe Faktoren dafür verantwortlich waren.

- (11) Did you involve one or several external consultants in the procurement procedure, especially for technical questions?
- To what extent was one or several external consultants involved?
 - Do you recommend external technical consulting?

a)
Nein, das entsprechende Fachwissen war vorhanden.

b)
Abhängig vom verfügbaren Know-How. Der Ablauf der späteren Phasen hängt von den Ergebnissen der frühen Phasen ab. Daher müssen die möglichen Ergebnisse der frühen Phasen bis zu einem gewissen Grad prognostiziert werden können, um entsprechende Kriterien und Anforderungen zu definieren. Das stellt auch höhere Anforderungen an die Expertise von Auftraggebern.

- (12) How did/will you handle the question of intellectual properties?
- Who owns the intellectual property and how does it affect the market?
 - What are the positive and negative aspects?

Eine pauschale Aussage dazu ist schwer möglich, weil es stark von den Marktverhältnissen und dem konkreten Auftrag abhängt.

Die wichtigste Frage ist, wie stark die Entwicklung auf bereits bestehende – geschützte – Lösungen aufsetzt. Wird eine bestehende Leistung lediglich adaptiert, dann ist es kaum möglich die Rechte am Ergebnis an den Auftraggeber zu übertragen, ohne massiv in die bereits bestehenden Rechte des Auftragnehmers einzugreifen. Umgekehrt haben bei sehr spezifischen, auf einen konkreten Auftraggeber optimierten, Lösungen die Nutzungsrechte für den Auftragnehmer weniger Wert, weil es kaum zusätzlichen Bedarf daran geben wird.

Für den Auftraggeber steigt das Projektrisiko bei einer IP, wenn er Entwicklungsleistungen zahlt, ohne Rechte zu erhalten. Denn wenn das Projekt vor der Abwicklung der Erwerbsphase abgebrochen wird, hat er Leistungen bezahlt, aus denen er selbst keinen Nutzen mehr ziehen kann. Umgekehrt ist es für einen Auftragnehmer meist nicht interessant an einem derartigen Projekt teil zu nehmen, wenn er die Ergebnisse selbst nicht vermarkten darf.

Soweit es nicht um Auftragsforschung bereits auf sehr grundlegendem Level geht, werden daher voraussichtlich die Nutzungsrechte am Ergebnis zumindest teilweise beim Auftragnehmer verbleiben müssen.

Block IV - Recommendations

(13) In your opinion, is something missing in the Directive? If so, please specify open issues.

Für die effiziente Vergabe wäre es sinnvoll gewesen, vor dem Erwerb der fertig entwickelten Leistung eine Anpassung des Angebotes vorzusehen und dabei die strengen Regeln für Vertragsänderungen zu lockern. Es gibt zwar Stimmen, die eine solche Lockerung aus dem Zweck der Bestimmung ableiten – im Text findet sie sich aber nicht.

(14) In your opinion, does/will the Innovation Partnership lead to more sustainable innovations within the public sector?

- a. If yes, why? Please name reasons.
- b. If no, why not? Please name reasons.

Ja.

Inhaltlich bringt die Innovationspartnerschaft wenig Neues und löst die Probleme bei der Vergabe innovativer Leistungen nicht. Insbesondere die Problematik der Erstellung eines Vertrages für eine noch nicht einmal entwickelte Leistung bleibt eine große Herausforderung.

Allerdings schafft die Einführung eines Verfahrens ausdrücklich für solche Leistungen Bewusstsein dafür, dass derartige Konstruktionen möglich sind. Darüber hinaus ist zu erwarten, dass auch die Vergabekontrollbehörden bei solchen Verfahren – aufgrund des Zwecks der Bestimmung – im Rahmen ihres Auslegungsspielraumes etwas kulanter sein könnten.

(15) Would you recommend procuring an Innovation Partnership?

- a. If yes, why? Please name reasons.
- b. If no, why not? Please name reasons.

Ja, sofern eine Leistung benötigt wird, die in dieser Form noch nicht auf dem Markt vorhanden ist, bietet die Innovationspartnerschaft dafür die beste rechtliche Basis. Es ist jedoch im Vorfeld zu prüfen, ob ähnliche Instrumente für den Einzelfall passender wären. Insbesondere:

1. Normaler Dienstleistungsauftrag im Verhandlungsverfahren, die (finale) Entwicklung bzw. Adaptierung bleibt ein vom Auftragnehmer im Rahmen seiner Angebotserstellung zu kalkulierender Leistungsteil ohne eigene Phase oder Zwischenwertung.
2. Forschungsauftrag – die Vergabe der Leistung erfolgt nach Abschluss der F&E-Leistungen separat.

Interview partner 2 - Forschungsförderungsgesellschaft

Block I - Innovation Partnership in general:

(1) Bitte nennen Sie die Unterschiede der Innovationspartnerschaft zu klassischen Vergabeprojekten.

- a. im Vergabeverfahren im engeren Sinn
- b. in der Vertragsgestaltung.

a. Als Vergabeverfahren ist gemäß § 120 Abs 1 RV BVergG 2018 das Verhandlungsverfahren mit vorheriger Bekanntmachung heranzuziehen. Die gesetzlich in § 120 Abs 2 RV BVergG 2018 festgelegten Unterschiede zu einem „klassischen“ Verhandlungsverfahren sind überschaubar und würden sich meiner Ansicht nach sowieso aus der Natur der Beschaffung von Innovationen ergeben, weil die heranzuziehende Lösung im Vergleich zu klassischen Vergaben hier in der Regel noch nicht feststehen wird:

1. die Innovationspartnerschaft kann nicht bereits auf der Grundlage des Erstangebotes gebildet werden, ohne in Verhandlungen einzutreten,
2. es steht dem öffentlichen Auftraggeber frei, in der Schlussphase des Verhandlungsverfahrens mit nur einem Bieter zu verhandeln, und
3. von den endgültigen Angeboten, die den Mindestanforderungen entsprechen und nicht auszuschneiden sind, hat der öffentliche Auftraggeber das erfolgreiche Angebot oder die erfolgreichen Angebote gemäß den Zuschlagskriterien auszuwählen.

In der Praxis wird es meiner Einschätzung nach folgende Unterschiede geben:

1. Die Ausschreibungsunterlagen gemäß § 119 Abs 1 RV BVergG 2018 müssen so präzise sein, dass ein Unternehmer Art und Umfang der geforderten Lösung erkennen und entscheiden kann, ob er einen Teilnahmeantrag stellt: Im Gegensatz zu klassischen Projekten wird man bei der Innovationspartnerschaft häufig die Leistung nur sehr allgemein beschreiben können. Aus meiner Sicht wird der Standardfall eine funktionale Leistungsbeschreibung sein, in der viele Zielvorgaben enthalten sind. Spannend ist hier die Abgrenzung der genannten Vorgabe des § 119 Abs 1 RV BVergG 2018 zu den allgemeinen Vorgaben des § 104 Abs 2 RV BVergG 2018 für funktionale Leistungsbeschreibungen.
2. Auswahlkriterien müssen gemäß § 119 Abs 2 RV BVergG 2018 insbesondere die Fähigkeiten des Bewerbers auf dem Gebiet der Forschung und Entwicklung sowie die Ausarbeitung und Umsetzung innovativer Lösungen betreffen. Aus meiner Sicht macht diese Vorgabe durchaus Sinn, sollte aber nicht isoliert angewendet werden weil es zusätzlich zu „F&E-Auswahlkriterien“ sicherlich weitere Auswahlkriterien geben kann und muss. Siehe dazu auch die Erläuterungen zur RV.
3. Zuschlagskriterien: Sowohl bei der Formulierung der Zuschlagskriterien als auch bei der Anwendung im Rahmen der Auswahl wird es aus meiner Sicht Unterschiede zum klassischen Verhandlungsverfahren geben, weil bei der Beschaffung von Innovationen die technische Lösung zu Beginn des Verfahrens noch nicht (zwingend) bekannt ist. Die Anforderungen aus Gesetz und Judikatur an Zuschlagskriterien werden sicherlich auch hier erfüllt werden müssen aber es kann schwierig werden, völlig unterschiedliche technische Lösungen, die auch ganz andere Kosten verursachen, miteinander zu vergleichen. Aus meiner Sicht werden im Bereich der Innovationspartnerschaft eigene Zuschlagskriterien-Sets entwickelt werden müssen.
4. Expertise: Für Vergabeverfahren zum Abschluss von Verträgen über die Innovationspartnerschaft wird es notwendig sein, Expertise im

Bereich Innovation und F&E beizuziehen und diese Aspekt besonders zu berücksichtigen.

- b. Bei der Innovationspartnerschaft handelt es sich um sehr komplexe mehrjährige Verträge, die in vielen Fällen auch mehrere Phasen haben werden. Dazu kommt, dass es mehrere Innovationspartner geben kann. Derartige Aspekte müssen bei der Vertragsgestaltung beachtet werden. Es müssen auch F&E-spezifische Eventualitäten beachtet werden wie zB dass die Entwicklung bei einem Partner oder bei allen Partnern scheitert. Zudem muss über Themen wie Geistiges Eigentum eine eigene Regelung getroffen werden, womöglich auch abhängig von der Phase, in der sich das Projekt gerade befindet. Schwierig wird auch die Festlegung von „fairen“ finanziellen Regelungen hinsichtlich des Risikos des Scheiterns der Innovationspartnerschaft.

(2) Welche Aspekte der Innovationspartnerschaft waren bisher auch schon zu erreichen und welche Methoden wurden verwendet?

Meiner Meinung nach waren theoretisch alle Aspekte der Innovationspartnerschaft theoretisch bereits bisher zu erreichen: Je nach Höhe des F&E-Anteils hat man bisher ein kooperatives Förderprojekt (Bedarfsträger und Forscher haben den Förderungsantrag gemeinsam gestellt), die Beschaffung einer F&E-Dienstleistung, eine vorkommerzielle Vergabe (PCP) oder die Beschaffung mittels Vergabeverfahren durchgeführt.

Ein wesentlicher praktischer Aspekt war aber bisher nicht erreichbar: Bei Projekten mit einem hohen F&E-Anteil war ein klassisches Vergabeverfahren (unter Berücksichtigung von innovativen Aspekten gemäß § 19 Abs 7 BVergG 2006) nicht möglich bzw mit hohen Risiken behaftet. Die Durchführung eines PCP hat aber sehr wenig Resonanz am Bietermarkt gefunden, weil am Ende des PCP die entwickelte Lösung ausgeschrieben werden muss und somit das Know-How nicht beim Entwickler blieb: Zum einen musste der Entwickler das Know-How für eine (potenziell europaweite Ausschreibung) zur Verfügung stellen und zum anderen bestand die Gefahr, dass ein Konkurrent den Auftrag erhält und im großen Stil diese Entwicklung produziert. Dieses Risiko wollten Bieter häufig nicht eingehen und haben deshalb kategorisch die Teilnahme an PCP verweigert. Hinzu kam vereinzelt die Sorge, dass der Entwickler wegen der „Vorarbeitenproblematik“ (§ 20 Abs 5 BVergG 2006) vom Vergabeverfahren ausgeschlossen werden.

Hier stellt die Innovationspartnerschaft aus meiner Sicht den entscheidenden Mehrwert dar: Der/die Innovationspartner wird bereits zu Beginn ausgewählt und muss nicht die Sorge haben, dass ihm sein Know-How abhanden kommt bzw dieses sogar einem Konkurrenten zur Verfügung gestellt wird.

(3) Auf welche Aspekte muss man besonders Acht geben?

Siehe oben.

Block II - Drafting of an Innovation Partnership:

(4) Wie sieht die Vertragsgestaltung mit unsicheren Ausgang aus?

Wesentlich wird sein, verschiedene Eventualitäten und die vertraglichen Folgen festzulegen. Das betrifft insbesondere folgende Punkte:

1. Reduktion der Partner/Kündigung: Diese wird zum einen vom Entwicklungserfolg von jeweils zu erreichenden Zwischenziele abhängen und zum anderen vom Budget. Zu denken ist außerdem auch an eine Zwischenbewertung der Partner, um diese pro Phase zu reduzieren.
2. Monitoring: Es muss ein regelmäßiges Auftraggeber-seitiges Monitoring über das Projekt laufen. Je früher erkannt wird, dass ein Projekt problematisch ist,

- desto früher kann (erforderlichenfalls durch Kündigung) eingegriffen werden.
3. Sicherstellung der Wahrung der Geheimhaltung: Die Partner müssen ihr Know-How in sicheren Händen wissen.
 4. Einhaltung der Kostenobergrenze: Festlegung einer Regelung für die Kostenobergrenze, Prüfung der Kostenobergrenze
 5. Abstimmung/Kommunikation: Regelmäßige Abstimmung ist unumgänglich aber der Aufwand darf für die Vertragsparteien nicht zu hoch werden
 6. Streitschlichtung: Einrichtung einer Stelle für Streitschlichtung
 7. Für die Erwerbsphase: Kriterien für die Auswahl eines Partners bzw wenn mehrere Partner verbleiben Kriterien für die Wahl der Lösung für den jeweiligen Spezialfall
 8. Rechte am geistigen Eigentum
 9. Risikoteilung: siehe unten

(5) Wer unterliegt dem Risiko einer Innovationspartnerschaft? The ausführende Organisation oder der/die Lieferant/in?

Das hängt grundsätzlich von der Vertragsgestaltung ab, wobei in § 121 Abs 2 RV BVergG 2018 die Zahlung einer Vergütung in angemessenen Teilbeträgen vorgegeben ist. Das hängt mit der Risikotragung zusammen: Wenn im Fall des Scheiterns die Rechte am geistigen Eigentum beim Innovationspartner verbleiben, muss die Tranche meiner Ansicht nach nicht so hoch sein, um angemessen zu sein. Dabei könnte man auch den Mehrwert für den Innovationspartner berücksichtigen, weil der Bedarfsträger zahlreiches Know-How eingebracht hat. Die Reichweite der Möglichkeiten der Festlegung geht meiner Ansicht nach von der Zahlung einer sehr geringen Tranche (diesfalls trägt er ein höheres Risiko, dafür hat er viel Know-How des AG du die Rechte bleiben im Fall des Scheiterns bei ihm) bis zur Zahlung von 100 % der Entwicklungskosten. Die 100%-Überwälzung des Risikos auf den Innovationspartner (also keine Tranche vorsehen und die Entwicklungskosten amortisieren sich durch den späteren Erwerb) halte ich im Hinblick auf die og gesetzliche Vorgabe für bedenklich. Wesentlich wird sein, eine vertragliche Regelung zu treffen.

(6) Nennen Sie bitte - wenn vorhanden und auch gültig – Ausschlusskriterien.

Ich bitte um Konkretisierung dieser Frage

Block III - Innovation Partnership in action:

(7) Wie und warum wählten Sie die Innovationspartnerschaft als bestes Instrument für Ihr Beschaffungsvorhaben?

-

(8) Wie sah der vorhergegangene Prozess aus?

- c. Welche Instrumente wurden verwendet?
- d. Wurden andere Vergabeverfahren in Kombination mit der Innovationspartnerschaft verwendet?

-

(9) Woher wussten Sie, dass der Markt Ihren derzeitigen Bedarf nicht erfüllen kann? Bitte beschreiben Sie die Marktrecherche.

-

- (10) Gab es unvorhergesehene Verzögerungen? Bitte nennen Sie Probleme vor und während des Beschaffungsvorhabens.

-

- (11) Wurden externe Berater/innen zu Rate gezogen? Inwiefern waren diese involviert und würden Sie externe Berater/innen (für technische Fragen) empfehlen?

-

- (12) Wie sah der Umgang mit geistigem Eigentum aus?
- e. Bei wem liegt das geistige Eigentum und welche Effekte hat das auf den Markt?
 - f. Bitte nennen Sie positive und negative Aspekte.

-

Block IV - Recommendations

- (13) Was fehlt Ihrer Meinung nach im Gesetzestext? Nennen Sie bitte Punkte, die bisher nicht beachtet werden.

Grundsätzliches: Die Gesetzesvorlage orientiert sich stark an den VergabeRL und lässt folglich einiges offen. Aus meiner Sicht ist es richtig, hier nicht zu detaillierte Regelungen vorzugeben: Genauere gesetzliche Regelungen schränken nämlich womöglich den Handlungsspielraum des Auftraggebers ein, was bei einer Materie, zu der es noch keine Erfahrungswerte gibt, schlecht sein kann. Würde der Gesetzgeber zB festlegen müssen, wie genau die Leistung beschrieben sein muss, wäre die Gefahr, dass er mangels Erfahrung einen zu hohen Detailgrad festlegt und somit niemand mehr sinnvoll die Innovationspartnerschaft nutzen kann. Ohne Festlegung wird es hingegen an der Judikatur liegen, sinnvolle Präzisierungen vorzunehmen. Meiner Einschätzung nach befinden wir uns derzeit in der Problemfindungsphase und werden bis zur nächsten VergabeRL ausreichend Erfahrungen gesammelt haben, um sinnvolle Verbesserungen gesetzlich festzulegen.

- (14) Glauben Sie, wird die Innovationspartnerschaft zu mehr nachhaltigen Innovation in der öffentlichen Verwaltung führen?

Ja, aber nur in den Bereichen, wo Innovationen sinnvoll sind. Auftraggeber müssen für sich einen Mehrwert an der Innovation erkennen, der den zusätzlichen Aufwand und das damit verbundene Risiko rechtfertigt. Derzeit sehen diesen Mehrwert nur Unternehmen, deren Betrieb von Innovationen abhängig ist (zB ÖBB). Nur durch die Zurverfügungstellung von Expertise und finanziellen Mitteln werden auch andere Auftraggeber einen Mehrwert erkennen können.

- (15) Empfehlen Sie die Verwendung der Innovationspartnerschaft?

Wieder ja, aber nur in den Bereichen, wo Innovationen sinnvoll sind. Das Instrument hat großes Potenzial aber muss richtig genutzt werden.

Interview partner 3 – IÖB-Servicestelle

Block I - Innovation Partnership in general:

(1) Please clarify the most important difference(s) between an Innovation Partnership and a previous award procedure project within

- a. an award procedure in the narrower sense;
- b. as well as in the freedom in the contractual arrangements given.

a.

- There is a precondition: An innovation partnership can only be chosen if there is no suitable product or service available – hence one can choose the IP if development makes sense in terms of PPI.
- The IP combines development and delivery/supply within one procedure and one awarding. Basically, there is no more competition after the development stage and before the delivery/supply stage respectively. This can potentially reduce time and effort for procurers but needs solid planning and negotiation at the early awarding stage.

b. Dazu kann ich keine qualifizierte Aussage treffen.

(2) Which aspects of an Innovation Partnership were already possible to reach and which methods were used before?

The IP is intended to make PPI easier for procurers or at least complement existing instruments for PPI. Those are/were first and foremost:

- *Wettbewerblicher Dialog* (as it provides a certain amount of freedom to let the suppliers influence the tender documents)
- *Verhandlungsverfahren* (as it provides a certain scope to negotiate an adapted tender documents)
- EU's PCP approach (as it provides a pattern on how to deal with a pre-commercial procurement and let multiple companies develop concepts or prototypes in order to see which one meets the actual need best)

(3) What particular aspects have to be specifically taken into account?

The IP combines development and (large scale) supply. Demanding large scale supply can potentially knock out smaller enterprises like start-ups which could on the other hand be very innovative during the development stage.

The price of the product to be delivered needs to be negotiated and set at an early stage. Estimating the price will be difficult for projects where fundamental developments are still necessary. Negotiating the price with companies on a level playing field will need the help of experts (e.g. from academia).

Block II - Drafting of an Innovation Partnership:

(4) How does the drafting of a contract with uncertain outcome look like?

Dazu kann ich keine qualifizierte Aussage treffen.

(5) Who bears the risk of an Innovation Partnership? The contracting authority or the supplier? Why?

According to procurers I have talked to both partners bear risks.

- The supplier brings in his resources (financial risk, personnel expenditure) but gets paid if he achieves intermediate goals.
- The contracting authority cannot be sure if its need will actually be met. An IP can potentially fail and would lead to inadequate or delayed public service delivery. If it failed at a later stage a significant amount of public resources would have been wasted (for intermediate compensation, personnel expenditure).

(6) Is it valid to express reasons for exclusion and if so, to which extent?

- a. Please name possible reasons for exclusion.

Dazu kann ich keine qualifizierte Aussage treffen.

Block III - Innovation Partnership in action:

(7) How and why did you choose the Innovation Partnership as the best instrument for your procurement project?

Dazu kann ich keine qualifizierte Aussage treffen.

(8) How did the prior process look like?

- a. Which instruments preceded the procurement process?
- b. Did you also use other tender procedures in combination with the Innovation Partnership?

Dazu kann ich keine qualifizierte Aussage treffen.

(9) How did you know that the current market cannot meet your need?

- a. How did you design the market research?

Dazu kann ich keine qualifizierte Aussage treffen.

(10) Did some unexpected problems or delays occur?

- a. If so, which problems/delays occurred before starting the procurement project? Please name the decisive reasons.
- b. If so, which problems/delays occurred while the procurement project was ongoing?

Dazu kann ich keine qualifizierte Aussage treffen.

(11) Did you involve one or several external consultants in the procurement procedure, especially for technical questions?

- a. To what extent was one or several external consultants involved?
- b. Do you recommend external technical consulting?

Dazu kann ich keine qualifizierte Aussage treffen.

(12) How did/will you handle the question of intellectual properties?

- a. Who owns the intellectual property and how does it affect the market?
- b. What are the positive and negative aspects?

Dazu kann ich keine qualifizierte Aussage treffen.

Block IV – Recommendations

- (13) In your opinion, is something missing in the Directive? If so, please specify open issues.

There is no clear indication on how to provide evidence that the precondition (no suitable product/service available) is fulfilled. *How much time do I have to invest in market research and sounding before I can get started with the actual IP? How and where do I have to announce my intention to start an innovation partnership so that suppliers with an existing product could approach me? Do they have to approach me? How can I make (as sure) sure (as possible) that no one will lodge an appeal?*

- (14) In your opinion, does/will the Innovation Partnership lead to more sustainable innovations within the public sector?
- If yes, why? Please name reasons.
 - If no, why not? Please name reasons.

Yes:

1. There are other instruments for PPI and according to legal experts the IP only slightly upgrades them. But the IP is certainly a signal and impulse for public authorities. It encourages them to procure innovations and makes clear that there is an instrument.
2. By combining R&D and supply the IP eliminates a second tender competition and therefore reduces the risk of suppliers to be commissioned with the development but then lose the tender for the large scale supply. This could increase willingness of the industry to participate in an IP compared to a classical R&D assignment.

No:

1. The IP does limit the public authorities' margin to make use of comparative advantages of companies for R&D *first* and other comparative advantages for large scale supply *later*. Within an IP one company (or consortium) needs to be able to manage both, R&D and supply. This limits the amount of possible partners. And this might also impede start-ups who cannot yet prove their capability for both stages. Powers (of a consortium) would be shifted towards the bigger players with well-established production capabilities but (comparatively) smaller innovative capacities.

- (15) Would you recommend procuring an Innovation Partnership?
- If yes, why? Please name reasons.
 - If no, why not? Please name reasons.

I would recommend it for projects with limited (meaning little or no fundamental) R&D so that the outcome can be estimated better.

Interview partner 4 - NAH.SH GmbH

Block I - Innovation Partnership in general:

(1) Bitte nennen Sie die Unterschiede der Innovationspartnerschaft zu klassischen Vergabeprojekten.

- a. im Vergabeverfahren im engeren Sinn
- b. in der Vertragsgestaltung

- a. Die Innovationspartnerschaft ähnelt in ihrer Ausgestaltung dem Verhandlungsverfahren. Die wesentlichen Unterschiede zu einem Verhandlungsverfahren sind:
 - das „innovative“ Produkt darf am Markt nicht bereits verfügbar sein
 - Festlegung Mindestkriterien für innovative Leistung und funktionale Leistungsbeschreibung im Teilnahmewettbewerb
 - Auswahl der Teilnehmer anhand Fähigkeiten auf dem Gebiet der Forschung und Entwicklung und Fähigkeiten hinsichtlich Ausarbeitung und Umsetzung innovativer Lösungen
 - Zuschlag allein auf Grundlage ‚niedrigste(r) Preis/Kosten‘ unzulässig
 - Zuschlag auf mehrere Angebote verschiedener Bieter möglich
 - Aufteilung in Forschungs-/Entwicklungs – und Leistungsphase
- b. Das Verfahren gibt keine bestimmte technische Lösung vor. Es müssen allerdings von den Fahrzeugkonzepten bestimmte Anforderungen erfüllt werden. Die Bieter müssen klar und verbindlich beschreiben welches Fahrzeug sie uns anbieten wollen. Die Bieter müssen bestimmte Eigenschaften des Fahrzeuges (z.B. Energieverbrauch) verbindlich zusichern. Sie müssen ebenfalls die Verfügbarkeit/Zuverlässigkeit der Fahrzeuge über deren Einsatzdauer von 30 Jahren zusichern.

(2) Welche Aspekte der Innovationspartnerschaft waren bisher auch schon zu erreichen und welche Methoden wurden verwendet?

Im Schienenpersonennahverkehr wurden bisher nach meiner Kenntnis offene Verfahren und Verhandlungsverfahren angewendet. Im Verhandlungsverfahren ist es bereits möglich mit den Bietern über bestimmte Aspekte des Vertrages zu verhandeln und die Vergabeunterlagen auf dieser Basis noch einmal zu optimieren.

(3) Auf welche Aspekte muss man besonders Acht geben?

Wie in allen Verfahren muss die Gleichbehandlung und Geheimhaltung gewahrt sein. Dies kann nach meiner Erfahrung in einer Innovationspartnerschaft eine besondere Herausforderung sein, weil:

- die Interessen der Bieter zur Geheimhaltung können im Konflikt stehen zu der Zielstellung im Verfahren auf Basis der Gespräche mit den Bietern die geforderte Leistung konkreter zu beschreiben
- wenn man technologieoffene Lösungen zulässt, müssen in der Bewertung verschiedene technische Lösungen berücksichtigt werden. Dies ist komplizierter als anhand einer konkreten, allen vorgegebenen Leistung Angebote zu bewerten.

Block II - Drafting of an Innovation Partnership:

(4) Wie sieht die Vertragsgestaltung mit unsicheren Ausgang aus?

Siehe 1b)

- (5) Wer unterliegt dem Risiko einer Innovationspartnerschaft? The ausführende Organisation oder der/die Lieferant/in?

Der Hersteller verantwortet die wesentlichen Risiken des Vertrages, weil der Hersteller am Besten in der Lage ist Bau- und Verfügbarkeitsrisiken zu bewerten und zu beeinflussen.

- (6) Nennen Sie bitte - wenn vorhanden und auch gültig – Ausschlusskriterien.

Wir konnten Bieter im Teilnahmewettbewerb ausschließen, wenn sie bestimmte Kriterien der finanziellen/wirtschaftlichen und technischen und Leistungsfähigkeit nicht erfüllt haben. Im Verfahren ist nicht vorgesehen die Bieterzahl seitens der Vergabestelle zu reduzieren. Es soll nur ein Unternehmen am Ende des Vergabeverfahrens bezuschlagt werden (d.h. wir nutzen nicht die Möglichkeit in der Innovationspartnerschaft mehrere Unternehmen zu bezuschlagen).

Block III - Innovation Partnership in action:

- (7) Wie und warum wählten Sie die Innovationspartnerschaft als bestes Instrument für Ihr Beschaffungsvorhaben?

Es handelt sich bei den innovativen Fahrzeugen um ein Produkt, welches am Markt noch nicht angeboten wurde. Zielstellung war es technologieoffen in das Projekt einzusteigen und mit allen Bietern über die konkrete vertragliche Ausgestaltung und die konkreten Anforderungen an die Fahrzeuge zu verhandeln. Aus dem Wettbewerb soll sich die beste technische Lösung ergeben. Aus unserer Sicht können diese Ziele mit einer Innovationspartnerschaft gut verfolgt werden.

- (8) Wie sah der vorhergegangene Prozess aus?
- a. Welche Instrumente wurden verwendet?
 - b. Wurden andere Vergabeverfahren in Kombination mit der Innovationspartnerschaft verwendet?

- a. Vor der Ausschreibung wurden mit Unternehmen Markterkundungsgespräche geführt, um abschätzen zu können, ob eine Ausschreibung in entsprechender Art und Weise Sinn macht/zu einem Ergebnis führen kann
- b. Die Innovationspartnerschaft ist bei der NAH.SH als Vergabestelle zum ersten Mal zur Anwendung gekommen

- (9) Woher wussten Sie, dass der Markt Ihren derzeitigen Bedarf nicht erfüllen kann? Bitte beschreiben Sie die Marktrecherche.

- a. Der Markt für Schienenfahrzeuge ist übersichtlich. Es ist allgemein bekannt, welche Fahrzeuge in Deutschland im SPNV angeboten und auch für das Schienennetz in Deutschland zugelassen sind.

- (10) Gab es unvorhergesehene Verzögerungen? Bitte nennen Sie Probleme vor und während des Beschaffungsvorhabens.

- a) Und b): bisher keine Probleme, wir haben aber aufgrund der Komplexität des Projektes längere Verhandlungen geführt als ursprünglich vorgesehen

- (11) Wurden externe Berater/innen zu Rate gezogen? Inwiefern waren diese involviert und würden Sie externe Berater/innen (für technische Fragen) empfehlen?

- a. Ja, sowohl technische Berater als auch Berater, die uns bei der vertraglichen Ausgestaltung und der Bewertung der Angebote unterstützen. Zudem gibt es einen Rechtsberater, der die NAH.SH in Vergabeverfahren unterstützt. Weiterhin wurden Experten für verschiedene technische Lösungen in zwei Sitzungen im Hinblick auf die angebotenen Konzepte befragt und deren Empfehlungen eingeholt.
- b. das hängt von der Komplexität des Verfahrens/des gesuchten Produktes, der dafür notwendigen Fachkenntnisse und der Kapazitäten innerhalb der Vergabestelle ab.

- (12) Wie sah der Umgang mit geistigem Eigentum aus?
- a. Bei wem liegt das geistige Eigentum und welche Effekte hat das auf den Markt?
 - b. Bitte nennen Sie positive und negative Aspekte.

Der Hersteller gewährt dem Land eine kostenfreie Lizenz für die gewerblichen Schutz- und Urheberrechte sowie für die übergebene Dokumentation, die zum Betrieb und zur Instandhaltung sowie zur Reparatur der Fahrzeuge jedoch nicht zum Nachbau der gelieferten Triebzüge berechtigt.

Block IV – Recommendations

- (13) Was fehlt Ihrer Meinung nach im Gesetzestext? Nennen Sie bitte Punkte, die bisher nicht beachtet werden.

-

- (14) Glauben Sie, wird die Innovationspartnerschaft zu mehr nachhaltigen Innovation in der öffentlichen Verwaltung führen?

Das kann ich nicht beurteilen

- (15) Empfehlen Sie die Verwendung der Innovationspartnerschaft?

Das hängt vom Charakter des Produktes ab, welches beschafft werden soll. Wenn es sich um ein Produkt/eine Leistung handelt, welche noch nicht am Markt verfügbar ist und von der Vergabestelle vorab nicht klar beschrieben werden kann, dann kann eine Innovationspartnerschaft Sinn machen.