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TITLE:

A CASE STUDY OF THE EXPECTATIONS FOR PUBLIC PROCUREMENT AND THE
RELATIONSHIP BETWEEN PRICE AND QUALITY

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ABSTRACT

The government spends 500 billion NOK on Public procurement each year. This amounts to 16 % of the total gross revenue. Both the government and the public have great focus on this money to be spent in an economically advantageous way. The introduction of new public management in public governance was a way to introduce a business mind set, and run government entities more like a business, to inspire cost saving and financial control.

My research was conducted as a case study with three cases using relevant theory and the rules and regulations for public procurement as a foundation. It started with as an aspiration to gain a better understanding of why price seemed to be the determining factor for procurement competitions where it publicly had been stated that quality should be the determining factor. For all cases quality had the highest weight and yet the offer with the low price was awarded the contract. The public dialog about these procurements made it sound like quality had been sacrificed for a low price, and part of me expected that to be in my findings. What I found was that in a competition with negotiations the principal is able to guide suppliers towards the optimum quality. The offered quality from suppliers become more similar, thus making price the factor where suppliers can differentiate themselves in the evaluation. The fact that price becomes the determining factor does not weaken the importance of quality for the procurement. During my research I found all contract awards conducted according to basic procurement principles and I started to wonder - why is it that we have such different expectations for the result of a public procurement and what it should deliver? Expectations isn't only for the government to spend our money wisely, it often seem like there is an expectation that one should get the best quality at the lowest price. I decided to explore what it is that influence these expectations, and what it is that separate public and private procurement practises.

I noticed that even if I have a background from procurement, my view and expectations of the results of public procurement competition should achieve, are influenced by different stakeholders communication and the media coverage. My own personal conviction could also have been part of clouding my judgement, making me assume that quality had been sacrificed for a low price when in reality the quality for all three cases were quite similar. Choosing the economically most adventurous offer is what we based on theory expect and yet we let feelings cloud our judgement when it comes to viewing the results for public procurement.

Table of content

ABSTACT	2
TABLE OF CONTENT	3
FOREWORD	5
CHAPTER 1: INTRODUCTION AND BACKGROUND	6
1.1 PURPOSE AND RESEARCH QUESTION	7
1.2 LIMITATIONS	8
1.3 STRUCTURE	8
CHAPTER 2 THEORY	10
2.1 PROCUREMENT - BASIC THEORY	10
2.2 PUBLIC PROCUREMENT	10
2.3 THE DIFFERENCE BETWEEN PRIVATE AND PUBLIC SECTOR PROCUREMENT	13
2.4 STAKEHOLDERS WITHIN PUBLIC PROCUREMENT	14
2.4.1 GOVERNMENTAL STAKEHOLDERS	14
2.4.2 OUTSIDE PUBLIC STAKEHOLDERS	15
2.6 RULES AND REGULATIONS FOR PUBLIC PROCUREMENT	16
2.6.1 PROCUREMENT PROCEDURES	17
2.6.2 COMPETITION WITH NEGOTIATIONS	18
2.7 EVALUATION MODELS	19
2.7.1 RELATIVE SCORE MODELS	20
2.8 AWARD CRITERIA	20
CHAPTER 3 METHODOLOGY	23
3.1 RESEARCH METHOD	23
3.2 INTERVIEW	24
3.3 RESEARCH METHOD FOR THIS PAPER	25
3.4 SOURCES OF ERROR	26
CHAPTER 4 THE CASES	27
4.1 PROCUREMENT OF AMBULANCE HELICOPTER SERVICES	27
4.1.1 INTRODUCTION	27
4.1.2 INTERVIEW - HOW THE WEIGHT FOR PRICE AND QUALITY WAS DETERMINED	28
4.1.3 EVALUATION	28
4.2 PROCUREMENT OF AIR AMBULANCE AIRCRAFT	31
4.2.1 INTRODUCTION	31
4.2.2 INTERVIEW - HOW THE WEIGHT FOR PRICE AND QUALITY DETERMINED	31
4.2.3 EVALUATION	32
4.3 PROCUREMENT OF "TRAFIKKPAKKE 1 - SØR"	35
4.3.1 INTRODUCTION	35
4.3.2 INTERVIEW - HOW THE WEIGHT FOR PRICE AND QUALITY DETERMINED	35
4.3.3 EVALUATION	36
4.4 HOW THE PROCUREMENT PROCEDURE INFLUENCES THE RELATIONSHIP BETWEEN PRICE AND QUALITY	39

4.4.1 IS THE DIFFERENCE IN SCORING FOR LESS QUALITY THAN PRICE?	39
4.4.2 DID THE PROCEDURE - COMPETITION WITH NEGOTIATION - AFFECT THE DIFFERENCE IN THE OFFERED QUALITY TO BECOME MORE SIMILAR?	40
4.4.3 WHY DOES PRICE SEEM LIKE THE DETERMINING FACTOR FOR A COMPETITION WERE QUALITY IS GIVEN THE HIGHER WEIGHT?	41
CHAPTER 5 THE RELATIONSHIP BETWEEN PRICE AND QUALITY	42
5.1 THE PRICE ELEMENT	42
5.1.1 COMPLAINTS ABOUT LOW PRICE	44
5.2 QUALITY	45
5.3 AMBULANCE HELICOPTER SERVICES	46
5.4 AIR AMBULANCE AIRCRAFT	46
5.5 TRAFIKKPAKKE 1 –SØR	47
5.6 SUMMARY	48
CHAPTER 6 EXPECTATIONS AND INFLUENCES FOR PUBLIC PROCUREMENT	49
6.1 EXPECTATIONS TO PUBLIC PROCUREMENT	49
6.2 STAKEHOLDERS WITHIN PUBLIC PROCUREMENT	50
6.3 HOW DID EXPECTATION AND DIFFERENT STAKEHOLDERS INFLUENCE HOW THE RESULTS OF THE CASES WERE PERCEIVED?	51
6.3.1 AMBULANCE HELICOPTER SERVICES	51
6.3.2 AIR AMBULANCE AIRCRAFT	53
6.3.3 “TRAFIKKPAKKE 1 - SØR”	54
6.4 SUMMARY	56
CHAPTER 7 CONCLUSION	58
7.1 THE RELATIONSHIP BETWEEN PRICE AND QUALITY	58
7.2 WHY DO WE HAVE DIFFERENT EXPECTATIONS FOR PUBLIC PROCUREMENT AND HOW ARE THESE EXPECTATIONS INFLUENCED?	60
7.3 WEAKNESSES WITH THIS PAPER	62
7.4 FURTHER RESEARCH	63
CHAPTER 8 REFERENCES	64
APPENDIX	72
FORESPØRSEL OM Å DELTA	72
INTERVJUGUIDE	73

FOREWORD

This master thesis is written as the concluding part of my master degree in business economics with the University of Stavanger. My specialisation has been strategy and during my studies I became passionate about the mechanism within public procurement. It became very clear to me that this was what I should write my thesis about.

I would like to thank my supervisor Bjarte Ravndal, not only for good guidance throughout this paper, but for also being the reason for my interest within public procurement. It was through his classes in Strategic sourcing I discovered my deep interest for this field.

I would also like to give a special thank you to the project managers from HIMAS and Jernbaneverket, who took the time out of their busy schedule to answer my questions. Without your insightful answers this paper would not have been possible. Thank you for sharing your knowledge.

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Stavanger

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Chapter 1: Introduction and background

Our expectation of the level of services delivered by the government has never been higher, and at the same time the focus on cutting costs within public management is increasing. Public procurement is a governing tool that can be used introducing competition for areas where there are traditional monopolies. Public procurement services can be used as a way to cut cost but also as a policy tool. However, the introduction of competition and the use of public suppliers is a sensible issue, and opinions are characterised by ideology more than facts. The introduction of competition is acknowledged as a way to save money within public procurement. Services previously being rendered by the government, is being set out for competition, allowing the public unity to bid for the service they previously had monopoly providing, in competition with private entities. With the introduction of ex-ante competition, it is said to have a cost saving potential up to 20 percent, and it has therefore become a popular way for governments to save money, often claiming they will get more quality for less cost (Domberger, Jensen, 1997, p. 68). Putting services out for competition is not without its challenges. In order to do so successfully one has to develop a detailed scope of work that will enable suppliers to bid on the services needed, and also one need to ensure that the evaluation criteria set for the procurement covers what was the need for the procurement in the first place. For large complex procurement setting evaluation criteria can be challenging, and preferably it should be able to measure “apple for apple”, but in reality it is often not this simple. Complex procurements with service in the evaluation form may be hard to measure objectively up against each other.

This research started with a desire to investigate why price seemed to end up being the determining in procurements where the determining factor was said to be quality. I wanted to explore the difference between price and quality as evaluation criteria and explore if quality was “sacrificed for a good price”. I decided to do so through a case study of public procurements recently conducted. Throughout my research I discovered that the expectation to what a public procurement should achieve is different from our expectation to procurement in general, often our expectation to the result of a competition seems to be the opposite of what is the logical choice. I therefore wanted to explore what influences our expectations, and how it affects our view of the results of a public procurement competition.

1.1 Purpose and research question

I started this research with a desire to learn more about the relationship between price and quality in evaluations. What inspired this desire was several procurements where quality is said to be the determining factor, still it was offered with the lowest price who won the competition.

By reading the papers I had an impression quality would be most important and still the lowest price and I wanted to explore why. The public debate left an impression that quality was sacrificed to save cost and I was interested to explore if this was the case. I decided to explore the relationship between price and quality in an evaluation, and determine what factors influenced them.

- **Research question 1:**

What are the relationship between price and quality in an evaluation and how is it affected by the choice of procurement procedure? Is quality being sacrificed for a low price?

Through my discoveries I started to ponder about another question, do we have different expectations to what results a public procurement should achieve compared to the expectations for procurement in general? One of the main reasons for introducing competition is a desire to cut cost, and promote innovation, within areas that often have a natural monopoly. Yet, when contract award is to the supplier offering the lowest price, we are left with an impression quality is being sacrificed. It made me wonder why we have such different expectations to the result of public procurement and what is it that influences these expectations?

- **Research question 2:**

Why do we have different expectations for public procurement and how are these expectations influenced?

This paper is conducted as a case study and it's based on the Procurement of:

- Ambulance Helicopter Services
- Air ambulance aircraft
- "Trafikkpakke 1 - Sør" - operation of the Norwegian railroad.

I also wanted to look into Trafikpakke 2 and 3, but was not able to retrieve any documentation from Jernbaneverket.

These cases were chosen because they have been criticised for sacrificing quality for price and claims have been made that they haven't been conducted according to the rules of public procurement. The aim for this paper is to offer insight in what it is that affects the evaluation result for price and our own opinions and different stakeholders influence quality and how our views of the results achieved through public procurement.

1.2 Limitations

This paper is conducted on the basis of information available through the media, tender documents and contract award. The evaluation model was all for all three cases classified as an internal document and not possible to gain access to. This limits the analysis of the evaluation. The evaluation is only reviewed at with data of the final evaluation round, in the preliminary round there were several suppliers who submitted offers, who wasn't invited to the final round of negotiations. These offers are not accounted for in this paper.

1.3 Structure

This thesis is organised with one section focusing on theory and a section for introduction and analysis of the cases and the influences affecting our view on public procurement. Chapter 1 is a general introduction of the paper and a presentation of the research question. Chapter 2 is a presentation theory for procurement in general, the rules and regulation for public procurement and theory for how different stakeholders have conflicting goals for public procurement. In chapter 3 theory about the methodology is presented and the research method for the thesis. It is followed by chapter 4, who has a review of the interviews for how a competition with negotiation affect the evaluation of price and quality and then a introduction

and a review of all the cases. It is followed by an analysis of the evaluation and the importance of the evaluation criteria price and quality. Chapter 5 is an analysis of how the different influences have the ability to affect our view on public procurement, and how their behaviour influenced what has been written and the perception for each case. Chapter 6 is a summary and conclusion for all findings in this paper

Chapter 2 Theory

2.1 Procurement - basic theory

One of the main goals for an organisation when conducting procurement is to ensure they get best value for money in their procurement decisions (Valletti, Dini, & Pacini, 2009, p1). The use of competitive tendering is recognized as a procurement procedure that ensures competition. A competition is often an incentive for suppliers to reduce their prices, allowing the buyer to pay market price. An open competition allows for transparency and can act as a safeguard against corruption. The use of competitive tendering helps identify who is able to produce the goods or service at the right quality, to the lowest price. (Valletti, Dini & Pacini, 2009, p 136). All procurement is conducted to achieve a goal. For private consumers goals are informal and for a company there most likely will have been conducted a strategy process defining what goals they aim to achieve. The common goal is to get most value for our money. What is considered the best value will vary, and there is always give and take between the price and quality. Even if there is no formal process for this trade-off, considerations are made to determine how much one is willing to pay to achieve more quality. For a private consumer this is an internal process based on preferences and for a company it is a more formal process that allows them to identify risk and the best opportunities. It is conducted in a uniform process that allows for an easy identification of the best value. (Schooner, Gordon, & Clark , 2008, p 6)

2.2 Public procurement

Each year the Norwegian government spends approximately 500 million NOK on goods and services, making public procurement an important activity (Isaksen, T.R, 2019). Spending this much money not only is it important to spend it wisely and according the rules and regulation, it can also be a tool to inflict political policy (Lundberg & Bergman, 2011, p 4) A trend of privatisation in the public sector started in the UK in the 70is and for a long time it was considered to be the profitable choice compared to contracting out. A leadership article in the Financial Times November 1986 would be the start of changing this view, stating the loss of public ownership i.e privatisation as less profitable as contracting. In Norway new public management was introduced by the first Stoltenberg government who took office in 2000 (Kagge, 2014). New public management is a way to organise and govern public entities to

achieve increased legitimacy and efficiency inspired by the principles from the private sector (Doksheim, 2020). It can be seen as the introduction for privatisation and contracting out in Norway and the use has only increased with the conservative Solberg government, who naturally focuses even more on privatisation and contracting out as their sourcing strategy.

The government sets the direction for public purchasing, and define directions and focus areas. It can be a tool for the government to fulfil public policy, used to achieve environmental goals, or working conditions requiring suppliers to have a system in place, but also goals about reducing public spending, and also more use of private suppliers within public services ((Torvatn & de Boer, 2017, p4) (Lundberg & Bergman, 2011, p 4).

Contracting out “means opening up to competition a set of economic activities which were previously immune from it. It is the element of ex-ante competition; “competition for the market as opposed to competition in it”, that is the cost saving factor (Domberger et al, 1997, p 2) It doesn't mean transfer of ownership nor that the task won't be conducted by the government, it means that both the public and private entities bid on the same contract and one chooses the best offer for a given time period. It is not only a way to identify who can supply the service at the right quality, to the lowest price, but also seen as a way to safeguard against corruption, and offer equal opportunities to all suppliers, and save money (Valletti, Dini, & Pacini, 2009, p 136). Time and research has proven that competition can be a cost saving factor (Domberger, 1998, p. 160). Since it is the competition and not transfer of ownership that is the cost saving factor, contracting out is said to contribute to savings, even when the service is won by the public organisations. The theory is that competition will sharpen all parties involved and give the government more value for money and can be an important management tool for the government to make “make or buy” decisions (Domberger & Rimer, 1994). It offers the possibility to test the market, to determine the best supplier based on price and non-price criteria.

As privatisation, contracting out can be a politically charged question. For many it is seen as a concealed way to privatise public sector. Others see contracting out as a method available to reform public sector, and unlike actual privatisation it does not involve sale of public ownership. Competition can stimulate to cost reduction, innovation and efficiency and it is said to have a cost saving expectancy of 20 percent (Domberger, Jensen, 1997, p. 68). The method is not without any drawbacks and even if the ex-ante competition offers the potential

of savings, not all public services are well suited for competition. It is also important to know that competition comes with a cost, there are costs for planning and conduct the competition, writing contracts and everything it entails while actually increasing cost, which is an important factor to calculate in.

The debate on the subject is often driven by ideological views more than facts (Domberger et al, 1997, p 70). Research has defined some areas of service more suitable than others, cleaning, catering and waste management services will raise less emotions than “prisons, welfare and other human services” (Domberger p 165). The latter are areas where “personal contact between the client and the provider is extensive, and where the provider needs to exercise judgement, force, care and compassion as part of the service delivery”. This view is reflected also in how Norwegian use of public contracting has been, where cleaning, catering and waste management has been contracted out without much controversy. In the latter year there has been a switch in the use of areas where contracting out is used such as services for “the National air ambulance service of Norway” and for Bane NOR and the operations of the railroad, which has caused much more controversial in the public debate. Privatising public services has since the introduction been a sensible subject, still the government will always seek “to spend public funding better and more efficiently, while contributing to solve social challenges within the country” (Isaksen, R, 2019). Contracting out can be seen as a way for the government to remain ownership and still modernise the public sector and get more value for money through competition.

In addition to traditional procurement goals as to get the best value for money, public procurement also has transparency, accountability and integrity as goals. These goals are regulated by law or regulations, and can reduce flexibility. One of the purposes of these goals is to safeguard against corruption and ensure openness. There are also social and economical goals of what to achieve (Schooner et al, 2008, p 7)

2.3 The difference between private and public sector procurement

When the motivation behind the purchase is governed solely by economic motives the make or buy decision is simple, use whichever is cheapest. However the public sector has many other considerations to take into account such as social objectives, accountability, equity considerations and security of supply (Domberger and Rimer, 1994). There are also the external demands of transparency, integrity, accountability and exemplary behaviour. A public organization's internal demands consist of the internal goals such as cost efficiency and delivery of service and also the goals of the general public. The internal goal and the goals of the public are often conflicting. For instance there might not be room in the budget for the level of service the public expects the public to provide them. Government officials will often use public procurement as a tool for their goals

Public procurement is dependent on funds that are granted through budgets, the budget define how much it is possible to spend and sets limitation for what is possible (Telgen, et al., 2007, p. 17). We expect the public to make the economical best choices, but we also want them at the same time to be beneficial to society and an instrument to drive innovation (Edler and Georghiou, 2007) and promote sustainability (Brammer and Walker, 2011, p 1). The trouble is of course that achieving one of these often excludes one or more of the other. It is hard to imagine how to drive innovation and at the same time achieve the highest profit, as innovation is expensive and takes time (Jakobsen, 2012).

In the first stages of the procurement process; *sourcing and delivering goods, compliance with legislation, efficient use of funds and accountability* acts in a similar manner as a private organisation. However public procurement is expected to focus on more than just cost vs. quality and an expectation for the product or service to have a larger contribution. It is not only expected to fulfil the goal of the procurement but also contribute to the overall goal for the public organisation as *supporter of broader government policy objectives*. They are not only expected to supply goods and services but also expected to be a supporter of change and reform, and contribute with policy goals such job creation and strengthening the industry (Telgen, et al., 2007, p. 21).

Research within public procurement (Miranda & Kim, 2004, Scott, 95) has shown that public organisations often are more driven by formal law and social expectations, than what is the

case for private companies. This behaviour is a result of the need to secure legitimacy for the choices being made within the public. It has also been found that this need is so strong that it prevails the traditional transaction cost logic that organisations are driven by “comparative efficacy”. Both political organisations and government agencies are expected to turn around fast and be positive when institutional pressure occurs, this helps explain why public procurement often is driven by legitimacy considerations (Miranda & Kim, 2006) and not transaction cost logic. To fully understand the reaction pattern of a public organisation, knowledge about institutional pressure is paramount. In Roar Jakobsens paper “Public sector contracting” from 2012, Jakobsen argues that an organization's formal structure is a result of the “institutional forces of rules and regulations, norms and social expectations and taken for granted knowledge” much more than functional needs such as resources and technology. The legitimacy is often achieved through following the rules and regulations.

2.4 Stakeholders within public procurement

Stakeholders are the participants affected by the choices of public procurement. It is useful to know who they are and where their interest lies within the decision making. There are two main groups: **the government** and **outside public stakeholders**.

2.4.1 Governmental stakeholders

The government is complex and has many layers, and conflicting interests. **Government leaders** will focus on having a system built on the legislation, to avoid any scandals. Their goal is to use the system to deliver services according to the needs of the government as flexible as possible. Politicians are also governmental stakeholders. Their interest can be more diversified. They can view public procurement as a “means to an end”, and events that can make them look good to their constituents. Often their focus can be on achieving short-term political goal. They are responsible for the approval of government funding and important groups with government stakeholders. If it benefits their case can work against approved procurement plans to fulfil their own short term goal. **Other governmental employees** work within different areas in the government and their interest will be in their own needs, many wanting a flexible procurement process, with room for them making the decisions they consider best. **Governmental customers** are the end users of the service or product procured. Their interest lies not with the overall goal of the procurement process, but focuses on having their needs met on time. For them a speedy process is the priority as this is what will deliver

the product or service they need faster. However this can differ depending on whom the stakeholders as governmental customers have different focuses (Schooner et al, 2008, p 17).

2.4.2 Outside public stakeholders

Outside public stakeholders doesn't have a direct role in the process but still have an interest.

The public is the largest group within this category. They have an interest for how the government spends their money. Within this group there are many diversified needs. However there is an overall expectancy for the government to spend their money wisely. There is an expectation for getting the most value for money and that the money isn't misspend.

The procurement system is expected to ensure integrity and safeguard against corruption.

Public procurement has a high level of transparency, still not all decisions made are available to public and this may cause them question the government's decisions. When the public become users of the service their role as a stakeholder and interest can change (Schooner et al, 2008, p 19). The **Oversight Community** holds the government accountable. It consists of the courts, the office of the Auditor General, interest groups and the media. The non-governmental group and the media play an important role in supplying the public with information about conducted procurement processes. These groups can be motivated by different interests, however they all provide "information, evaluation and criticism of public procurement", and transparency is considered to be one of their main concerns. (Schooner et al, 2008, p 20). **Non-Government Oversight** is a group consistent with third party observers that looks into the procurement process and watches out for corruption. They investigate and report various procurement and these reports are made available to the public. The media is also an important contributor within this group. Their role and interest in the procurement system can be one sided, focusing on corruption and misconduct. When they choose to highlight such matters it influences the public's view on how public procurement is conducted and this is a factor the government and policy makers should be mindful of. (Schooner et al, 2008, p 21).

The last group is the **private stakeholders**. This is the private companies that have a role as suppliers to the government or companies trying to enter into a contract. This group is motivated by profit. Being awarded a contract with the government is lucrative and secure. It offers the supplier a long time commitment and be good for their reputation (Schooner et al, 2008, p 22).

2.6 Rules and regulations for Public procurement

Public procurement is a complex system with conflicting goals. There are both procurement (*quality, timeliness, cost, minimizing business, financial and technical risks, maximizing competition, and maintaining integrity*) and non-procurement goals (*preferring a local company, environmental goal and social goals such as the protections of minorities*) to be considered in the process and these goals are often in conflict with one another. Finding the optimum relationship between these goals can be challenging. It is therefore important to have clear public regulations defining the organization's structure, role and responsibility.

Regulations should be a roadmap for the whole procurement process, it is a good guideline for how public procurement should be conducted and it adds legitimacy and ensures a fair and equal treatment of suppliers, and offers the public reassurance that there is a diligent process (Thai, 2001, p 27-28) It is often assumed that it is easy to adopt the principles and theory from private procurement and adapt them in public procurement. To gain a better understanding, it can be useful to investigate what, if anything sets public procurement apart. To be able to achieve the best possible result, knowledge about the mechanism guiding the process is necessary in order to know which theories and methods to apply. Procurement within the private sector is much more driven by internal procedures, while public procurement is derived externally, by a rigid set of rules and regulation.. In the private sector the goal is making a profit, the public sector expected to accomplish larger. There are many stakeholders, often with incompatible objectives related to economy, society, politics and innovation. We expect the public to make the economical best choices, but we also want them at the same time to be; (1) beneficial to society, (2) an instrument to drive innovation (Edler and Georghiou, 2007) and promoting sustainability (Brammer and Walker, 2011). The trouble is of course that achieving one of these often excludes one or more of the other. It is hard to imagine how to drive innovation and at the same time achieve the highest profit, as innovation is expensive and takes time (Jakobsen, 2012). Law embodies public procurement regulation. The Norwegian legislation is influenced by our agreement with the European Union through the EEA agreement. The rules and regulation for public procurement, within the EU are guided by article 65 and the main principles are: (1) non-discrimination (2) equal treatment (3) Transparency (4) Proportionality (5) mutual recognition and (6) competition. The same principles for the Norwegian legislation are: (1) Promote efficient use of resources (2) Contribute to integrity in behaviour with public organisations, to ensure trust in the public that public procurement is conducted in a manner that is in community service (3) Ensure efficient

use of community resources (4) Efficient competition in the market (5) Enhance integration and trade, also giving access to supplier from other EU/EEA countries (6) Equal Treatment and predictability (7) Prevent corruption and enhance the public's trust in government financial management and (8) Professionalism and standardisation

The principles of transparency, equal treatment and open competition is designed to ensure an European cross country market, meant to increase competition, gain better offers and ensure the government to be perceived as a professional counterpart. Critics have argued that even though having a highly regulated public procurement system does encourage open competition, reduce corruption and reduce improper use of taxpayers money, it is not without a cost (Torvatn & de Boer, 2017,). An “open competition” also initiates a requirement for highly detailed regulations, and this again will erode getting “value for money”. In order to gain openness and transparency, transaction cost will rise. When the main focus is on an open competition, more than achieving the best offer, transaction cost is expected to rise (Domberger & Jensen, 1997, p 69). To address these issues, both the Norwegian and European legislation was updated in 2015/2016, with the goal of simplification, social responsibility and regulations with room for flexibility (Saussier & Tirole, 2015, p 1). In the guidance for public procurement, published by Nærings- og fiskeridepartementet, the term “*the most economical adventurous offer*” is said to be an overall criteria for contract award ([Nærings- og fiskeridepartementet](#), 2017, p 202). This term is not a part of the Norwegian legislation but should be seen as a basis for the three alternatives for contract award: (1) lowest price (2) lowest total cost and (3) best relationship between price/lifecycle cost and quality. The most common method used within the European Union and for large complex procurements is the method that is a combination of price and quality. (Lundberg. S & Bergman, M, 2011, p 2). Working within public procurement has the possibility to be a challenging environment due to strict procurement legislation. It is one of the most sensitive areas of government, there can be political interferences, which can be legal and illegal and the suppliers who is not awarded the contract will most likely be displeased and users can dislike the fact the procurement now is centralised and that they have little influence over the process in a now ridged system (Thai, 2004, p 1).

2.6.1 Procurement procedures

Reducing public spending has been a focus area both in Norway and within the EU, and one of the changes that were made was allowing a more lenient process. The regulation of public

procurement guided by threshold values, which defines which part of the law is applicable to use. This is regulated in chapter two of Law of public procurement. Part I is applicable for all procurement equal or above 100 000 MNOK, part I og II regulates procurement below EEA-threshold value and special services and part I og III is for procurement where the estimated value of the service exceeds (1,3) 2 mill ex mva and 44 mill - construction (EEA regulation). As this paper addresses large procurements, it will only focus on the procedures defined in part III. Chapter 13 regulates procurement procedures for procurement over the EEA threshold values in law of public procurement. It's stated that the principal always has the choice of an open or restricted bidding competition (§ 13 - 1). An open competition allows all qualified suppliers to submit offers, a limited bidding competition is only open for those suppliers invited to participate by the principal. If applicable terms are fulfilled the following procedures are also available: competition with negotiations after prior announcement, competitive dialog, and competition with innovative partnership, competition with negotiations without prior announcement, procurement without competition. All the cases examined in this paper are competition with negotiation, this is the only procedure that will be elaborated.

2.6.2 Competition with negotiations

Competition with negotiation allows for negotiation of all parts of the tender and is regulated in § 23-7. Suppliers have to request participation and fulfil defined pre-qualification requirements. It is possible to only choose a limited amount of suppliers to submit offers. Negotiations with suppliers are allowed after they have submitted their offers. This applicable when the terms for §13 - 2 and 13-3 of the procurement regulation is fulfilled and for procurements above EEA threshold values. There are no strict terms in order for the principal to use this procedure and it is meant to be a useful tool all, particularly for procurement concerning design or innovation, or for large complex procurements and should not be used for procurement of standard products available in the market. It is conducted as a two-step procedure. It starts off with a prequalification open for all interested suppliers, then suppliers who fulfil the principal's requirements will be invited to submit offers. As long as a minimum of three suppliers are invited to submit an offer it is possible for the principal to limit the number of suppliers invited. It is also common to conduct a prequalification seminar for suppliers. As long as the chosen method is described in the tender documents, the principal is free to decide how to conduct the negotiation process. It can be conducted in several phases,

each phase may reduce the numbers of suppliers participating in the competition. All evaluation should be conducted on the basis of award criteria. The main purpose of the negotiation is to reach the best possible offers and as long as the negotiation should not include any changes to significant deviations, changes or absolute minimum requirements. The principal should offer the supplier's feedback on their submitted offers and offer guidance on how to improve them. Information that is related to the supplier's chance of winning the contract should be addressed but the principal is not obliged to inform the supplier of any negative factors in their offer. This information should be conducted without giving out any information about the other received offers. (Difi, 2019)

2.7 Evaluation models

The most common models for evaluation are (Difi, 2019):

1. Evaluation based on the lowest price where price is the only criteria or evaluation based on the lowest total cost - this also considers life cycle cost
2. Evaluation based only on quality (fixed price)
3. Relative score models evaluation based on a combination of the lowest price / total cost and the best quality, based on predefined criteria made available to suppliers in tender documents.
4. Pricing of quality as an evaluation method

When deciding on an evaluation model one should strive to use a model as simple as possible, and it is recommended that the model chosen is well known within the procurement team.

There are no rules and regulations guiding what model that has to be used. One should consider the expected price spread and the expectations and the actual pricing should be an important factor of influence in which model is chosen.

Quality should always be awarded maximum score for the best offer for each evaluation criteria to maintain the accurate price vs. quality weight. The choice of model has the ability to affect the outcome of the competition, one should therefore consider the strengths and weaknesses of the models. The most common method within the European Union, and for large procurements, is an evaluation model with price and quality, called relative score models. When both price and quality is part of the evaluation it becomes more complex (Lundberg & Bergman, 2011, p 2). As this paper is about public procurements that are a mix

of both price and quality we will only examine the theory for relative score models and pricing of quality as an evaluation method.

2.7.1 Relative score models

A relative score model assesses the price/cost and the qualitative criteria in relation to each other and not against predetermined criteria. All criteria are assessed from a scale where the weights between criteria are taken into consideration. The most common models are based on the lowest price giving maximum score and the points for the other offer are assessed against the lowest price offer. A challenge within these methods is recalculation of price into points and awarding qualitative criteria points, and then uniting them in a common system.

Linear method

The linear method is the difference in scoring reflected by the percentage difference in price. The starting point is the lowest offer, which is given top score, and then the scoring for the other offer is calculated with the formula:

$$\text{Total Score Offer X} = 10 - 10 \times (\text{Price Offer X} - \text{Price lowest offer}) / \text{Price Offer X} \quad (\text{Difi, 2019})$$

This model is not recommended for offers with an expected large price spread, for offers with more than 100 percent over the lowest offer it will give a negative scoring, which is deemed illegal according to KOFA 2007/131 (Utviklings- og kompetanseetaten, Oslo Municipality, p 8).

Proportional method

This method distinguishes well between offers with similar price range, however the model is not well suited for large price differences between the highest and lowest offer. It is calculated using the formula:

$$\text{Total Score Offer X} = \text{Max Score} * (\text{Price for the lowest offer} / \text{Price offer X})$$

The difference in scoring will be less the higher the price difference is. (Difi, 2019) (Utviklings- og kompetanseetaten, Oslo Municipality, p 8).

2.8 Award criteria

To ensure that the suppliers who submit offers are qualified to perform the services needed, a pre qualification phase is conducted. Suppliers have to apply with **mandatory criteria**, to safeguard against suppliers not being qualified to end up having the winning bid. These are mandatory criteria meaning that suppliers either comply with them or they are not allowed to submit an offer (Difi 2016). As long as these criteria are proportional to the procurement, and not discriminating suppliers based on location or nationality, the Principal is free to set these requirements as they see fit, cf. § 16-1, second paragraph (Anskaffelsesloven).

Award criteria are a tool to ensure the offer covers the important items of the competition. It is regulated by Regulation for Public Procurement chapter 18, and the guideline is that the criteria should measure what adds value to the procurement, either technical or financially. They should be designed to ensure product deliverance according to the strategy for the procurement and it is important that they are measurable. The award criteria may not be discretionary in such a way that they allow the principal unlimited freedom of choice (regulation for public procurement §18-4) and can be focused around price or non-price related criteria, or a combination of both. Price, quality, capacity, competence and experience, implementation capacity, environmental properties, service conditions, plan for implementation and understanding of the assignment are examples of what can be chosen to be award criteria . It is not a goal to have as many criteria as possible, often it is easier to measure what is most important having only a few and focusing on the main (risk) areas. (Hansen, Kjell, 2019)

2.8.1 Weighting of award criteria and scoring rules

An evaluation that consists of both price and quality has to assign each of them a weight to establish the importance. Price and quality is evaluated separately, and then merged according to the given weight. The weight of each criteria, is a signal to the market, on the importance of each criteria. (Difi, 2019)

2.8.2 Scoring rules and the use of scale for award criteria

A scoring rule can be seen as a way to identify how well suited a supplier is to fulfil the need for the procurement in the evaluation (Lundberg & Bergman, 2011, p 3) and should be designed as a reflection of the preferences and needs of the principal. For evaluation of price,

total cost and quality, it is recommended to use an evaluation model that gives a score for each award criteria and multiplies it with the relative weight of the criteria.

A scale from one to six or one to ten should be applied. The scale should be substantial enough for the scoring to be a reflection of actual differences offered. Each score is then summarised and the offer with the highest score is the winner of the competition. A scale who is independent of the assigned weight, makes it easier for the differences in the offers to be reflected. (Vekting og bruk av poengskala | Anskaffelser.no, 2018) (Utviklings- og kompetanseetaten, Oslo Municipality, p 6).

Chapter 3 Methodology

3.1 Research method

The first and most important step in order to conduct successful research is deciding the research method and develop a plan for how to conduct it. The first step is deciding on research design. The research design can be seen as the overall strategy for the research. A good plan on how to perform the empiric research is necessary, and one should choose a design that enables the researcher to find the wanted information within the given constraints (Ghauri, P & Grønhaug, K, 2010, p 54). Make sure it addresses logical problems and not logistical. In order to be able to describe the research question you want to solve, you need to choose a method and research design that enables you to answer what you seek to describe. Make sure the research question has substance, and remember that the way the research question is asked can help guide towards the most applicable research method. Depending on the question the researcher wants to explore there are different methods available. To explore questions such as how and why a case study is recommended (Yin, R, p 9). For this paper case study was chosen. Case study as a method gives insight about a given subject, and allows exploration of key characteristics, meanings and implications. It gives the researcher a real life perspective on the phenomena (Yin, R, 2014, p 4). Yin defines case study as “ a way of investigating an empirical topic by following a set of desired procedures” (Yin, R, 2014, p 23) The method can allow for in depth investigation of a case (Yin, R, 2014, p 16) and make it possible to investigate more variables than just data points and is reliant on multiple sources of evidence. It can be conducted for one single case or multiple cases and it has to include empirical data. Empirical data can be either qualitative, quantitative or both within case studies. (Yin, R, 2014, p 19). Case study as a method is not without concerns. It has been questioned if this method is really diligent? A systematic procedure should be followed and if the researcher is not aware of this, or if he allows vague evidence to affect the findings and conclusions, this will weaken the findings of the research and should therefore be avoided. The reason this is a higher concern within case studies, is due to the fact procedures for how to conduct a case study seem to be less available than for other methods, who have more specific procedures. Another concern about case studies is that some have mistaken case study research with studies conducted for learning and not purely research. The difference between the two is not always clear.

3.2 Interview

Interview is a much used method to gain insight within case studies (Yin, R, 2014, p 110).

The interview can be structured in different ways, and should be designed to best suit your research study. It can be an effective way for data collection and the purpose is to get information that will further the research (Ghauri, P, Grønhaug, K, 2010, p 125).

The most important factor to gain insight and be able to conduct a good case study, is to ask good and relevant questions. When conducting data collection, and examining the facts, new questions are likely to arise (Yin, R, 2014, p 73). A key element in designing good questions is to remember that researching is about the questions just as much as about the answer. A good tip is to have a protocol where you can write down questions that arise during data collection, and use this as a place to raise questions and list likely data sources during your case study (Yin, 2014, p 90). This protocol can be a good tool for developing the questions and the interview guide. The interviews can be conducted by mail, by phone or in person (Ghauri, P, Grønhaug, K, 2010, p 125). For a successful interview the researcher should preferably have knowledge about the responded, such as background, values and expectations. The interview can be conducted as a **structured or unstructured interview**.

A structured interview has a predetermined standard format. All questions are set in advance, there is a fixed format and systematic sampling of information. They are often combined with quantitative measures and statistical methods. An advantage with this method, is that all the respondents get the same questions which makes it easier to compare the answers. It is also possible to send the questions to the responder in advance allowing time to reflect before answering. For some types of question it can also disadvantage, taking away the immediate response, and allowing time for the responder to consider what is answered.

An unstructured interview is conducted in a freer manner. The free form of this kind of interview, allows for it to appear more as a form of conversation. There might be some key words for the interview prepared in advance on what topic to cover, but often the questions come up as the conversation flows and opens up for discussion, follow up questions, the possibility to discuss reactions and opinions of the responder. It allows for more in depth conversations and a greater possibility to explore the respondents knowledge as new questions arise as the conversation flows. It allows for more sharing of knowledge but also personal

opinions and the researcher has to be mindful of this and ensure to remain objective Ghauri, P, Grønhaug, K, 2010, p 126).

3.3 Research method for this paper

I knew early on I wanted to gain in depth knowledge about large public procurement competitions and felt a case study would be the best way to achieve more knowledge about how they are conducted and what influences them. The data collection started with reading available documents online at Luftfartsverket.no and Jernbaneverket.no. Much of the strategy process conducted in advance and the tender documents can be found there. I also contacted the project managers for each project for the information that wasn't available to trace online and to ask them if they would be available for an interview later on. As this research is partly about the relationship between price and quality it would have been interesting to be able to investigate the evaluation models. This was not possible as all the cases had classified them as internal documents. They all responded positive to my request for an interview, pending they had time. This made me consider what kind of interview I should conduct. Preferably I would have liked to do a face-to-face interview or at least one over the phone, to allow for conversation and the possibility to ask follow up questions. However due to distance and to ensure there would be time for the respondent to answer, I decided to conduct an interview by mail. To prepare for the interview I read all the strategy documents for each procurement, tender documents and the award documents. I also read complaints from suppliers and the principals answer, which offered a lot of insight. Part of what I wanted to explore was why a low price seemed to be more important than quality, even when quality was said to be the determining factor. During my reading I wrote down all the information that I wanted to explore further about each case, and I used this information to develop an interview guide. This interview guide ended up being quite extensive. To make sure the questions I asked were relevant and understandable, I asked acquaintances working within procurement to do a read through and comment. It made it clear that some of the questions were redundant and it removed any uncertainty for the questions being asked. The questions were conducted in Norwegian, since it is our common language. The answers have been translated to be included in this paper. The findings in my research made me want to explore a second research question: why do we have different expectations for public procurement and how are these

expectations influenced? To explore this question I used applicable theory about stakeholders for public procurement and connected this theory with the public dialog for all three cases.

3.4 Sources of error

For all research it is important to be aware of sources of error that might affect the outcome of the research.

This case study is only conducted on the basis of three cases, preferable there should have been more. Originally there were two more cases that I wanted to include, but it was not possible to get a positive response about the necessary documents. The time available prevented the findings of other applicable cases. In order to explore the relationship between price and quality at a more statistical level, it would have been useful to conduct a quantitative analysis to explore the difference in the use of procurement procedure and if this influences the scoring for quality. That would have added to the quality of this paper, and is something I recommend for further research.

Interview as a method offers a number of possible weaknesses. The questions asked may not be good enough, or can be misunderstood by the respondent. All of the interviews were conducted via email, which prevents any personal connection with the respondent. Yin recommends having a good knowledge about the respondents before conducting the interview which was not the case in this study.

Conducting a written interview by email can prevent the respondent to answer spontaneously and can be a source of error. All the questions were however of a more general character, to avoid any feeling of bias, so I don't consider this to be an issue for this paper. A structured interview by email will not allow for the free conversation of an unsystematic interview and it may prevent the amount of information received. However all the received answers were insightful and allowed for a better understanding of the procurement process conducted.

Chapter 4 The Cases

All information in the case review is retrieved from the tender documents or the award letters unless stated otherwise

4.1 Procurement of Ambulance Helicopter Services

4.1.1 Introduction

The first case was the procurement of Ambulance helicopter services for all of Norway, for the period 1. juni 2018 – 31.mai 2024. The value of the procurement was estimated to 410 million NOK but the final cost for the contract was 500 million NOK, an increase of 100 million NOK from the previous contract period. Two suppliers held the previous contract. The procurement was conducted as a competition with negotiation. Qualified suppliers were invited to submit offers and the best offers participated in negotiations. The scope of the procurement was a total operation of all air ambulance bases, including the procurement of and operation of ambulance helicopters and a medical car. The national ambulance service consists of 13 ambulance helicopters stationed at 12 bases, in addition to nine ambulance airplanes stationed at seven bases and six rescue helicopters bases.

The procurement process was divided into a pre qualification phase, a pre qualification conference for the qualified suppliers, submission of offers and then negotiations. The strategic goal for the procurement was to ensure a robustness of the service and that suppliers should plan staffing, to ensure a high readiness and preparedness. There were five suppliers taking part in this competition, but only four suppliers submitted an offer. Suppliers were offered to bid on 6 different regions. It was stated that each supplier would be awarded a minimum of two regions, and should submit their offers accordingly. They were also invited to make an offer of all 6 regions, defined as a 7th region. The principal had stated that they would prefer a solution with two suppliers, but only if the total cost of such a solution would not lead to more than **1 percent** price increase. This solution also opened up for choosing the second best economically advantageous offer.

4.1.2 Interview - How the weight for price and quality was determined

This is a summary of the information received in the interview with the project manager for how the weights for price and quality was conducted. The interview was conducted in Norwegian and the answers have been translated into English for a coherent read of the paper.

The weights between price and quality, is a reflection of the award criteria. When the product or service is not complex, mandatory criteria can be enough to ensure a basic standard is fulfilled, and a high weight for quality criteria is not necessary. For more complex procurement, weight is important. It becomes more important to be able to assess the difference in the offered quality for each sub criteria, which helps the principal separate the good and less good product or services. Quality is often given a higher weight when the procurement is complex and this was also the case for this procurement. The principal conducted the weight according to these principles. A calculation of the real weight for each criteria was conducted after the tender documents were finalised to ensure the balance was as desired.

4.1.3 Evaluation

Evaluation criteria were given the weight 40 percent for price and 60 percent for quality. It was stated that the economically most advantageous offer should be chosen from a total assessment based on the defined criteria for evaluation of price and quality.

The evaluation of price was conducted based on fixed and variable pricing including:

- A set fee and technical hour rate multiplied with flight hours for each base together with backup helicopters
- Unit prices for additional crewmembers related to new ESA work and rest time regulations multiplied with crew bases
- For each base

The **proportionate method** was used for calculation of the scoring. With this method the offer with the lowest total price was awarded 10 points. Points for the other offers was calculated according to this formula:

$$(\text{sum best offer}) / (\text{sum best offer X}) * 10 = \text{Points for offer X}$$

The score was after recalculated into points with a weight of 40 percent.

The evaluation of quality was divided into:

- **Mandatory criteria:** minimum demands that had to be met for the offer to be considered - offers that did not meet those would be declined - there were 152 mandatory criteria
- **Evaluation criteria** where divided into EV1 and EV2 – criteria.

The weight between the different sub criteria was:

- Requirement for aircraft 25 percent
- Requirement for progress 25 percent
- Requirement for rescue technical 7,5 percent
- Requirement for medic car 20 percent
- Requirement for quality, readiness and competence 22,5 percent

Evaluation result for price:

1. Norsk Luftambulanse, Offer D	10
2. Norsk Luftambulanse, Offer B	9,92
3. Norsk Luftambulanse, Offer A	9,82
4. Norsk Luftambulanse, Offer C	9,66
5. Lufttransport, Offer 1	8,66
6. Lufttransport, Offer 3	8,64
7. Lufttransport, Offer 2	8,64

Evaluation result for quality

1. Lufttransport, Offer 3	10
2. Lufttransport, Offer 2	9,97
3. Norsk Luftambulanse, Offer C	9,8
4. Lufttransport, Offer 1	9,73
5. Norsk Luftambulanse, Offer B	9,72
6. Norsk Luftambulanse, Offer A	9,7
7. Norsk Luftambulanse, Offer D	9,67

Looking at the evaluation of price and quality next to each other it is interesting to see how the tables are practically reversed and according to basic procurement theory, that with better quality comes a higher price

The final evaluation result based on the merge of price and quality was

Supplier	Total score	Price
1. Norsk Luftambulanse, Offer B	9,8	NOK 3.054.947.078
2. Norsk Luftambulanse, Offer D	9,8	NOK 3.031.036.072
3. Norsk Luftambulanse, Offer A	9,75	NOK 3.087.777.203
4. Norsk Luftambulanse, Offer C	9,74	NOK 3.136.976.893
5. Lufttransport, Offer 3	9,46	NOK 3.508.777.203
6. Lufttransport, Offer 2	9,44	NOK 3.508.923.961
7. Lufttransport, Offer 1	9,3	NOK 3.499.958.756

All the offers were given maximal or very close to maximal score in the evaluation of quality criteria. The scoring range was from 10 to the best offer to 9,67 with the lowest offer. The difference in the scoring range for the offered price was from 10 to 8,67, which is a whole point more in difference. In monetary terms the lowest price was 3.054 million NOK and the highest was 3.508 million NOK.

Analysing this procurement from a best value for money mind set, it is only logical to choose the offer with the lowest price. The difference in the offered quality from the first and last offer was 0,33 and the difference in the offered price was approximately 500 million NOK. It would make no sense from a responsible economical view to choose an offer who was that much more expensive to gain that little quality.

The difference between the offer with the lowest price and the winning offer, was that the winning offer was for a new AW139 helicopter while the offer with the lowest price offered the same helicopter only used. This shows that the principal will choose the best quality as long as the cost ratio between the increased quality and price is reasonable. In the justification for the contract award it is said that the offers from Norsk Luftambulans and Lufttransport were practically identical. *“There were differences in the progress plan where the winning offer had a lesser solution and with the simulator solution where the winning offer offered a better solution. The large difference in the two offers was that the winning offer had a **substantial lower price.**”* This is a good example of that when quality criteria gets awarded similar scoring, the offered price becomes an important factor even if it is weighted similarly.

4.2 Procurement of Air ambulance aircraft

4.2.1 Introduction

The second case is the procurement for operation of ambulance flight services, for the period July 1, 2019 30.juni 2025. The value of the service was estimated to 2,2 billion NOK a year in the tender process and the total value at contract award was 2,6 billion NOK. Three different suppliers previously operated the contract. The procurement was conducted as a competition with negotiations with contract award for one supplier. The scope for the new contract was a complete operation of all air ambulance aircraft at relevant bases, including acquisition and operation of ambulance aircraft, staffing, maintenance, emergency preparedness, equipment, training etc. The national air ambulance consists of nine ambulance aircraft at seven bases, in addition to 13 ambulance helicopters on standby at 12 bases, and sick rescue helicopter bases. The Strategic goal for the procurement was to ensure a robust manning of the service and reduce the time where the service is unavailable due to unforeseen personal matters.

4.2.2 Interview - How the weight for price and quality determined

This is a summary of the information received in the interview with the project manager for how the weights for price and quality was conducted. The interview was conducted in Norwegian and the answers have been translated into English for a coherent read of the paper.

There are several important factors determining the weight between price and quality for procurement. It will be dependent on the overall strategy and goal for the procurement. How important is a high quality for the product or services. Market considerations such as the difference in the quality offered by suppliers. In a market where suppliers traditionally offer similar quality, quality becomes less important, and increasingly important if suppliers usually offer services with larger differences. Another important factor to consider is the monetary value of the quantitative difference in quality. How easy is the offered quality transferred from paper to reality, it can be challenging to measure subjective quality such as work experience and quality of their work. Even if a person has a lot of experience on paper it is not a guarantee for a good deliverance of quality. The mandatory criteria is an important

safeguard to ensure high quality, in fact it is possible to have an evaluation purely based on price, and still have quality as the most important factor, covered by mandatory criteria. For this procurement all these factors played a part in deciding the weight between price and quality, however top management made the final decision. For this evaluation and comprehensive mathematical model was developed, taking into account the weight including the sub criteria. To test the model a simulation was conducted. It is difficult to predict how the difference in price and quality offered from suppliers will be in advance, but a simulation offers a better basis for the evaluation.

4.2.3 Evaluation

This resulted in evaluation criteria with a 40 percent weight for price and 60 percent weight for quality. The economically most advantageous offer was to be chosen from a total assessment based on the defined criteria for evaluation of price and quality.

Price was evaluated using the supplier's fixed and firm prices, inclusive -a fixed remuneration, technical price per hour multiplied with flight hours per base as well as for reserve aircraft (according to attachment B - price form). The evaluation was conducted according to the **proportionate method**. The offer with the lowest total sum for price is given the score of 10. Points for the other offers are calculated using the following formula:
$$(\text{Sum best offer}) / (\text{Sum offer X}) * 10 = \text{Points for offer X}$$
and then the score was recalculated into points with a weight of 40 percent.

The evaluation criteria for quality was a total of 367 requirements divided into:

Mandatory criteria: minimum demands that had to be met for the offer to be considered - offers that did not meet those would be declined

- **Evaluation criteria** were divided into EV1 and EV2- criteria. The offer that best fulfilled the evaluation criteria was awarded the highest score, and there were 95 evaluation criteria.
- **Contract criteria:** criteria to be fulfilled by the supplier throughout the contract period.
- **Documentation of requirement:** criteria the supplier needed to document was fulfilled.

272 criteria were either mandatory criteria or contract criteria

The weight between the sub criteria segment was:

- Requirement for aircraft, approvals, and flight coordination 27,5 percent
- Requirement for progress 20 percent
- Requirement for medical furnishings 25 percent
- Requirement for quality and competence 20 percent
- Requirement for readiness 7,5 percent

Evaluation result for price

1. Babcock, Offer 1	10
2. Babcock, Offer 2	9,62
3. Lufthtransport, Offer A	9,01
4. Lufthtransport, Offer B	8,99

Evaluation result for quality

1. Lufthtransport, Offer A	10
2. Lufthtransport, Offer B	9,94
3. Babcock, Offer 2	9,64
4. Babcock, Offer 1	9,51

Also for this case the evaluation of price and quality show an almost complete reversal when price and quality is evaluated.

The final evaluation result based on the merge of price and quality was

Supplier	Total score	Price
1. Babcock, Offer 1	9,7	NOK 2.584.048.652
2. Babcock, Offer 2	9,63	NOK 2.685.392.497
3. Lufthtransport, Offer A	9,6	NOK 2.868.130.887
4. Lufthtransport, Offer B	9,56	NOK 2.874.027.782

Also in this case suppliers got high scoring for almost all their evaluation criteria for quality, the difference between the highest score (10 points) and the smallest score (9,51) is only 0,49 points. There were some differences in the type of aircraft offered, but in total this was said to be of little difference. *Babcock had the highest score for the category 1 airplane medical furnishing, requirements for the aircraft in category 2 and approvals. For competence both suppliers got the same score. For all other categories Lufthtransport was awarded the highest score. For readiness Babcock got the lowest score, particularly for their winning offer (offer 1) as this offer have a lower number of pilots in rotation and less back up aircrafts.* The difference in price between the lowest and highest offer is approximately 300 million NOK,

with the best offer from Lufttransport being 11 percent higher than the winning offer, in monetary terms equal to million NOK per year. The estimated cost for this procurement was estimated to be 450,9 million NOK, however the received offers were substantially higher, and the yearly cost for the new contract was 500 million NOK a year. This was a 25 percent increase from the previous contract. Due to the increased cost it was looked into if it was possible to cancel the competition. The differences in offered quality are as shown, less than the differences in the offered price, indicating that when the more similar the offered quality is, the more important price is. However it can be argued that even if it is price that is the determining factor it is not quite so simple. There are mandatory requirements to be fulfilled that ensure the level of quality being delivered, and also to be a part of the competition the suppliers has to offer high quality in order for them all to receive almost maximal scoring, meaning that even if it can seem as price is the determining factor, it does not take away from the importance of quality.

4.3 Procurement of “Trafikpakke 1 - Sør”

4.3.1 Introduction

The third case is the procurement for operation of the Norwegian railroad, for the area defined as “Trafikk Pakke 1”. This service was previously a monopoly conducted by NSB on behalf of Jernbaneverket. Previous to this competition the cost for running the operation of the railroad was 468 million NOK per year, with the new contract the new price is estimated to be 150 million NOK per year, which is a substantial theoretical cost saving from the introduction of ex-ante competition. The procurement was conducted as a competition with negotiations and contract award will be for one supplier. This is the first time this service is subject for competition, the operation of the Norwegian railroad has been a government run monopoly. The scope for the competition is the operation of the railroad for the area “Trafikkpakke 1 Sør”. It gives the supplier an exclusive right (monopoly) to operate the public railroad for personnel transport. The Strategic goal for the procurement was to increase the public train service and contribute to the zero aim pollution targets for car traffic, particularly around the large cities. Another goal for the competition was to contribute to more satisfied customers and ensure the government got more back for their resources spent on train services. The most important goal was to contribute to an increased use of the railroad, to ensure an increase in travellers and their satisfaction. The stated overall goal for “Trafikkpakken” was: *“The government will through competitive tendering of Trafikkpakken contribute to an increase in customers and customer satisfaction through selecting the operator that delivers the most customer friendly and cost efficient offer.”*

4.3.2 Interview - How the weight for price and quality determined

To determine how the weight between price and quality was determined, I conducted an email interview with the procurements project manager. Part of the interview will be reproduced in Norwegian to ensure transparency and accuracy, the rest is translated to ensure a coherent read.

“Jeg vil med tanke på Trafikkpakke 1 omformulere litt og si ... vurderinger som ble gjort før valg av vektingen ...” according to the railroad reform a balance weight between price and quality was important, and at the same time it was important to send a signal to the market that quality was an important factor and that it would not be **price alone** that would determine who won the competition. However one of the motives behind the railroad reform and as stated

in tender documents was for the government to “*få mer for den ressursinnsatsen som ble lagt ned i pakken.*” This was the reasoning when deciding on the weight between price and quality for this procurement.

Different evaluation models were tested prior to the decision. However in an evaluation applying a linear model, where the best offer for each criteria is awarded a score of 10 and the lowest will get 0, one supplier can get a collectively better score with the help of sub criteria and win the competition on that basis.

4.3.3 Evaluation

For evaluation criteria price was said to have 40 percent weight, and quality was to count 60 percent. It was stated that the economically most advantageous offer was to be chosen from a total assessment based on the defined criteria for evaluation of price and quality.

Evaluation - price: For the evaluation of price, the price was calculated from the offered fixed remuneration for all seven and half years plus the one plus one year option, plus the sum of hourly prices for other assignments = Total offered fixed remuneration for Trafikkpakke 1 (2019 - 2028) + (sum of all hourly prices from appendix B - 1 point 2)

A basis **linear model** was used to range the other offers. The offer with the lowest price was given 10 points before taking the weight for price (40 percent) into account. Any offer that was 100 percent higher than the lowest offer was given the score 0.

The Model for calculating price points was

$$= 10 - (10 \times (\text{price offered} - \text{lowest price offered}) / (\text{lowest price offered}))$$

The winning offer was for 150 million NOK a year and it was 21 percent less than the next offer.

The evaluation of price was not possible to retrieve from Jernbaneverket, however from media coverage it is known that the winning offer from Go-ahead was 150 million NOK, the offer from the second runner up NSB was 21 percent higher, which means it should have been 181,5 million NOK.

For evaluation of quality there were 117 mandatory criteria for suppliers to fulfil. The mandatory criteria was to ensure customers the same quality as today's service (Hovland,

2018). Then there were 15 sub criteria suppliers was assessed by, and the criteria were divided into sub criteria assigned different weight:

How will the supplier achieve satisfied customers (6 criteria)	40 percent
How does the supplier manage the vehicle (3 criteria)	5 percent
Suppliers organisation and management (6 criteria)	15 percent

For the other cases the sub criteria were given a weight of 100 percent and then recalculated to the weight of 60 percent. For this case the weight for quality criteria was in total 60 percent.

Evaluation result for price

Evaluation criteria - Quality

(Slotsvik, K. L, 2018)

1. Go-Ahead	1. SJ Norge	129,15
2. NSB	2. NSB	126,70
3. SJ Norge	3. Go-Ahead	119,75

It was not possible to retrieve any information about the scoring awarded for price from Jernbaneverket. This means that an analysis for the relationship between price and quality will be incomplete.

NBS was awarded the highest score for 12 of 15 award criteria for quality, and Go-Ahead who was the winner only scored highest for one award criteria for quality. The winner of the competition was the supplier who of the three finalists had the lowest quality score (Bentzrød, S.B, 2018). Kirsti Slotsvik in Jernbaneverket says that one of the reasons Go-Ahead won was because they estimated to recruit a higher number of passengers, and that in the end price was the deciding factor (Bentzrød, S. B., & Furuly, J., 2018, October 17). In the evaluation for these criteria the order was: 1. NSB – 9.2, 2. SJ Norge – 9,1 and 3. Go-Ahead – 8,4 Bentzrød, S.B, 2018. These numbers leave room to question this statement.

The statement of price being the deciding factor, does contradicts the previous communication from Jernbaneverket where Dagfinn Berge, Director of Passenger Traffic Agreements, stated, “it's not how far low the offered price is that should be the determining factor. “ In all fairness he did add that “Price should be weighted 40 percent, quality and considerations for employees 60 percent” (Bentzrød, 2017). However the way this was

communicated did leave an impression that for this competition a low price would not be determining, even if this was something impossible to promising, giving the weight of the competition was set to 60 – 40 percent, meaning that even if counted less, price is still an important factor in the competition.

The theoretical cost savings for this competition is substantial. Previously Jernbaneverket had paid NSB 485 MNOK a year for their operation of the railroad. With their new agreement it is estimated that they will pay 150 NOK to Go-Ahead (Bentzrød, S. B., & Furuly, J., 2018, October 17). However the real savings in cost will only be able to be evaluated after the contract is finished. It is said publicly by Go-Ahead, and also stated in the contract that all employees will be offered work with the wages and working conditions they have today. This is also stated in the contract. (Contract between Jernbaneverket and Go-Ahead) (Bentzrød, S. B., & Furuly, J. 2018, October 17). The potential saving for this service was made possible through the introduction of competition in the ex-ante stage. It was not only Go-Aheads offer that would result in savings, also NSB's offer for 180 million NOK, was substantially lower than what the service is operated for today. It is important to remember that these savings still only are theoretical, and the real savings will not be visible before the contract is up and running.

4.4 How the procurement procedure influences the relationship between price and quality

The below questions and answers from project managers are not directly connected to each case, but are answered in general. The answers have been translated to English to ensure a coherent read, with some exceptions where it is reproduced in Norwegian for accuracy.

4.4.1 Is the difference in scoring for less quality than price?

When reading all available information for the different cases I noticed that the difference in score awarded for quality seemed less than the difference in the scoring for price. I wanted to get the project managers take on this, and if it was something they could relate to.

In their answers all project managers answered that this was not uncommon. There could be different reasons for this:

- In negotiations the principal is able to guide suppliers towards what he want. When all suppliers receive guidance, their offer will become more similar, particularly for quality.
- When quality is reviewed on the basis of the written offers – the real challenges (and differences) with quality are often not detected before the contract starts.
- Sometimes the difference in the offered quality from suppliers was less than expected and the offered price was the real difference.

- Two of the project managers also said that in an evaluation it was important to use the whole to be able to distinguish the difference in offered quality.
- The project managers stated that through negotiations the offered level of the offered quality, in addition to become similar, reaches a high level. This is very good and basically what you want to achieve through negotiations.
- One of the project managers stated: *“The difference in the scoring for quality becomes less because the principal is able to guide supplier towards the desired optimum. This is not possible to do in the same way for the price element. Price consist of the suppliers cost and profit, and the ability to cut cost and profit, is an internal consideration with the suppliers organisation, and much harder to influence than the element of quality through negotiations.”*

4.4.2 Did the procedure - competition with negotiation - affect the difference in the offered quality to become more similar?

In an answer from Jernbaneverket to a complaint from SJ Norge it was stated “*i en anbudskonkurranse med forhandling vil forskjell på kvalitet gir mindre utslag på score*”. Could this help explain why quality evidently seemed to be less important than price as the determining factor for contract award? Did the procedure - competition with negotiation affect the difference in the offered quality to become more similar? I included those questions as part of my interview to project manager for each of the cases.

All of the project managers could relate to this and explained this with the possibility to guide suppliers toward the desired optimum in a negotiation. When each supplier is given the possibility to improve his or her offers through guidance from the principal the offered quality will become similar and harder to distinguish.

Ja jeg kjenner meg igjen i dette. Det er slik at en kvalitet på en leveranse i en forhandlingssituasjon blir bedre.

Det er ofte tilfelle og henger nok sammen med at oppdragsgiver i større grad veileder alle tilbyderne i forhandlingene gjennom hvilken kvalitet som ønskes og det er lettere for tilbyderne å forbedre sitt tilbud. Oppdragsgivers målsetning med forhandlingene er stort sett alltid å øke kvaliteten på alle tilbudene og redusere prisen på alle tilbudene.

I innledende tilbud har ofte tilbyderen svart på en måte som gjør at det ikke kan gis full score på et krav. I forhandlingsmøtet har oppdragsgiver muligheten til å gjøre tilbyderen oppmerksom på dette, og de gis en ny sjanse til å oppfylle kravet bedre. Det øker sannsynligheten for at flere tilbydere oppnår lik score (full score) på flere evalueringskrav, og dermed blir den totale scoren mer lik for flere tilbydere.

4.4.3 Why does price seem like the determining factor for a competition where quality is given the higher weight?

Another common denominator for all cases was that price seemed to be the determining factor for contract award, despite quality having a higher weight. This was one of the mail questions I wanted to explore for this paper, to see how price could end up being what decided the competition.

- One project manager stated “it is not uncommon that the difference in awarded score for quality is less than for price. In an evaluation, to ensure predictability, the award criteria for quality and price is divided into sub criteria weighted according to importance. Each criteria is evaluated and summarized to the total score. When the offered quality is similar, price will become the determining factor even when quality has a higher weight. “

“For å ivareta forutberegnelighet er alltid tildelingskriteriene kvalitet og pris operasjonalisert ytterligere, kvalitetskrav ofte i undervektning og evalueringskrav. Evalueringen gjøres på hvert krav og modellen hensyntar den oppsatte vektingen slik at summen av alle kravene gir en overordnet score. “

- Another stated that: When the offered quality is given very equal score and the difference in the offered price is substantial, price becomes the determining factor, even when quality has a higher weight in the competition. Many suppliers use a strategy where they offer an “ok” or sufficient quality but offers a low price in order to enter the market. To safeguard against this and ensure that the quality offered is sufficient, for the deliverance, purchasers should use mandatory criteria to ensure that the offered quality is at a satisfactory level.

Two of the project managers stated that the result of the evaluation is a mathematical calculation and can offer unexpected results. Even if these results are different than the “desired outcome” the principal is bound by the results from the evaluation.

Chapter 5 The relationship between price and quality

The choice of procurement procedure gives different possibilities. When competition with negotiations is used as the procurement procedure, the principal is able to guide suppliers towards their wanted optimum, which in turn allows suppliers to improve their offers with a better understanding of what the principal wants. ((Dimitri, Piga, & Spagnolo, 2006, p 133)

Through the conducted interviews I discovered that the negotiation often can make the offered quality become more similar as all suppliers become close to or reaches the optimal quality for the offer. When one element of an evaluation is similar, suppliers need to stand out in the other areas to be selected.

5.1 The Price element

The element of price in a competition consists of several components. In the offered price, suppliers have incorporated different factors. It is dependant on the suppliers personnel cost (wages and pension), their operation cost and also how effective they are able to conduct their operation. If the offered price is dependent on the supplier conducting a purchase of goods it will be dependent on the purchasing power of the organisation. A large supplier can have the benefits of economies of scale and the ability to secure better deals with their suppliers, enabling them to offer a lower price than their competitors. Innovation and the ability to work smart is also an important factor for suppliers to reduce cost. (Project manager, Interview, 2020) ((Dimitri et al.2006, p 146) It can also be influenced by if they have faith in their own ability to lower cost throughout the contract period. Some cost will be common for all suppliers and some are defined by the capability f their organisation. Wages can be seen as a common cost for all suppliers, but a supplier is free to negotiate with its employees if they are willing to reduce their salary in order to secure the contract. This can be something other suppliers haven't thought about and set the supplier apart from the other. How suppliers calculate the cost of the can be dependant on how they estimate the complexity of the task (Dimitri et al.2006, p 14)

Another important factor for the offered price is the profit. Suppliers compete for contract to earn money, and the suppliers willingness to reduce their profit influence the offered price. It

can be dependant on their willingness to take a risk, and also how much they want to enter the market. It is not uncommon for suppliers to offer a low price to enter the market. A public contract can offer the supplier long time stability and also a good reputation, which again can make it possible for the supplier to make more profit in other areas (Schooner et al, 2008, p 22).

All of these elements are dependent of the internal organisation of the supplier, and not something the principal can influence the same way through negotiations. Since this element is dependant on internal factors it is up to the supplier to decide what price they need in order to be able to conduct the assignment. The principal will want to achieve the best price possible, but at the same time they don't want suppliers to offer a price that doesnt allow them to fulfil the contract. (Bruvoll, T, lecture, 2019) (Dimitri et al.2006, p 149). The term "winners curse" is when the price is so low the contract generates losses for the supplier awarded the contract (Dimitri et al.2006, p 149).

Price becomes the deciding factor when the offered quality is similar. This does not automatically mean that quality is being sacrificed for a low price. In all three cases for this paper suppliers offered a high and similar quality. This allowed the principal the ability to choose the lowest price with an assurance that a good quality was secured. Quality was also ensured through the use of mandatory criteria that had to be fulfilled in order for the suppliers offers to be considered. These requirements are a predefined minimum level of quality the supplier has to abide to. It is not possible to predict how an evaluation will turn out, and these requirements can be a way to safeguards and to ensure a sufficient predefined minimum of quality for the product or serve. The Ambulance Helicopter Services case had 152 mandatory criteria (Luftambulanse, 2015) , for the Air ambulance aircraft case were 272 (including contract criteria to be fulfilled during the contract) (Luftambulanse, 2016) . For Trafikkpakke 1 - Sør mandatory criteria was specifically used to ensure the public would receive the same offer as they had today (Jernbaneverket, 2017).

The difference in the offered price was for each case substantial, and for the total contract period the differences between the winning offer and the nearest competitor was:

- 500 million NOK for the procurement of Ambulance Helicopter Services
- 300 million NOK for the procurement of Air ambulance aircraft
- 300 million NOK for Trafikkpakke 1 - Sør.

5.1.1 Complaints about low price

For the procurement of “Air ambulance” and for “Trafikkpakke 1 – Sør”, there were complaints from the losing suppliers that the price in the winning offer would not be enough to cover personnel cost related to wages and pension for the contract. A winning offer with a price that isn't viable can be a serious risk both for the principal and the supplier. A good example of this was the Veireno case for Oslo Municipality, in this case the supplier ended up being unable to supply the service and went bankrupt. There are different ways the principal can safeguarding against this, pre qualification of suppliers is conducted to ensure that suppliers have a healthy financial situation and to ensure that they have knowledge and experience from the service or product in question. This was conducted for all cases in this paper. When suppliers have submitted an offer that is substantially lower than its competitors the principal has to investigate this and ensure the supplier is confident in their calculations. A meeting with the supplier in question should be conducted. If the supplier confirms the price is valid, the principal has the choice of rejecting, if is stated in the tender documents. The principal will have to show that the supplier will be unable to supply the service at the offered price, if not they can be responsible for damages. However it is important to remember that the goal of a procurement competition is to lower cost, and that competition can promote innovation. Suppliers are being encouraged to think outside the box, to identify new and smarter ways to supply the service. When pushing the boundaries of how things “always have been done” it is possible for suppliers to find new and smarter ways to organise their operation their competitors haven't thought of. Suppliers can also have chosen to lower their own profit in order to win the contract. This means that a price competitors think is to low, also can be a competitive advantage, and the introduction of a new and smarter way of working, that offers potential savings. It is important that the principal conduct a review of the suppliers calculations that offers assurance that they have a good understanding of the task at hand. If the supplier can offer the principal such reassurance, an abnormally low price does not need to offer a risk. Such a meeting was held with the suppliers for the procurement of Air ambulance aircraft and Trafikkpakke 1 – Sør. The complaints that these offer should have been rejected were denied.

5.2 Quality

When the suppliers have had the chance to improve the quality in their offers, the difference between suppliers is often marginal. As the answers from procurement managers showed through guiding it is possible to receive a high quality from all suppliers. As a result there is little that distinguish the offered quality from the suppliers. The difference in the offered quality can be hard to detect when the evaluation is only conducted on written merits, and the challenges will often only be detected after the contract has started (Project Manager, Interview, 2020)

The difference in the scoring between the suppliers awarded the contract and the nearest competitor was:

- 0,28 for the procurement of Ambulance Helicopter Services
- 0,36 for the the procurement of Air ambulance aircraft
- 9, 4 for Trafikkpakke 1 – Sør (the highest ranked offer was given 129,15 and the winner 119,75)

All three cases received offers that was defined as a high score for quality. In the Ambulance Helicopter Services and Air ambulance aircraft case scoring was consistent between 9 and 10. The difference between the offered qualities from suppliers can be defined as marginal. There can be larger differences on item level, but as for the deliverance of quality as a whole the difference is marginal.

For Trafikkpakke 1 – Sør, the scoring was in the range of 7 and 9. According Jernbaneverkets own definition, scoring between 9 and 10 is considered to be excellent (“svært godt”) and scoring between 7 and 8,9 as good (“meget godt”) (Berntzrød, 2018). There are critical voices that disagree with this evaluation of scoring for quality, and claim that the differences are substantial. It is hard to determine who is correct, if any. The criteria for this procurement are all of a more subjective nature for how the supplier plans to conduct the service, and are harder to measure than quality that are measurable

5.3 Ambulance Helicopter Services

For the procurement of Ambulance Helicopter Services the difference in score for quality was 0,28 between the winning offer and the best offer from the competitor, while the difference in price was 500 million NOK. There is no logical reason to claim that quality was in any way sacrificed for this procurement. On the contrary the offer with the second best price was chosen, because it offered the use of new helicopters. This is an example of a trade-off between price and quality, conducted on the basis of getting the best value (Valletti et al, 2009 p 295). The tender for this procurement an option that the contract could be awarded to more than one supplier, should the price difference be less than 1 percent. However the price difference of this option was 7 percent, which didn't make this option possible.

5.4 Air ambulance aircraft

For Air ambulance aircraft procurement, the difference in score for quality between the winning offer from Babcock and the best offer from Lufttransport 0,36. The price difference for this was of 300 million NOK. It has been documented that most of this price difference was achieved through a reduction in wages for 13 million NOK and pension for 30 million NOK each year. Some has argued that it is immoral and wrong for the government to use wages and pension condition as a mean to cut cost, while others claim it is exactly this innovative thinking the competition was meant to promote (Fridstrøm, 2020). The debate of what is right and wrong is as always more about ideology, than facts. From a procurement view it would have made no sense to choose an offer that was substantially more expensive only to achieve a marginal increase in quality. Even if the government is expected to uphold certain standards, there is nothing preventing them to promote new ways for suppliers to cut cost. The second runner up in the competition, was also the supplier who previously held the contract and they would have been free to negotiate with their employees in order to reduce cost.

5.5 Trafikpakke 1 –Sør

The procurement of Trafikpakke 1 –Sør, is a bit different. There are larger differences in the offered quality. The total score for quality for SJ Norge was 129,15, NSB was awarded 126,7 and Go-Ahead got a score of 119,75. There are larger differences in the offered quality, and it can be argued, as many does, that the winning offer only had one criteria were they had the best score for quality. According to Jernbaneverkets own considerations a score between 7 and 8,9 is considered to be very good and a score between 9 and 10 is considered excellent (Bentzrød, S. B., & Furuly, J., 2018, October 17). Go-Ahead consequently scored lower than its competitors in the quality evaluation, except for one criteria and the difference in total score for quality was 10 point is leaves more room for doubt that quality was sacrificed for a low price without this necessarily being a fact. The mandatory criteria for this procurement designed to ensure that passengers would as a minimum receive the same quality as they had, ensuring the offers to customer being satisfactory regardless of the chosen supplier (Jernbaneverket, 2017). In order for this contract to be a success for Go-Ahead, they will have to deliver. What suppliers offer in the evaluation criteria are binding, and will be measured thought the contract period. Go-Ahead is also dependant on attracting passengers to ensure their own revenue and to be in compliance with the contract.

Also an evaluation is a mathematical calculation, were it is the best total offer that is chosen. There is less information available about the evaluation model and the calculations conducted, and some of the critic has been that the process isn't transparent enough. It has also been claimed that this would have shown that the competition had been "ridged to favour the offer with the low price (Berntzrød, 2018). These claims are only speculations, and none of the suppliers have made a formal complaint of the process to KOFTA. There were two determining factors for the winning offer, (1) the lowest price and (2) a higher stipulation of the number of passengers. If they succeed it can give higher revenue and secure a higher profit, despite having offered a lower price than their competitors. Suppliers confidence in their own ability can be a factor that gives incentive to lower the price in order to win the contract. If they manage to attract more customers their revenue can increase, which can make up for the cost reduction. Go-Ahead as a winner of the competition is reliant to offer an attractive service to keep and ensure an increase of customers, so they have little incentive, as some suppliers may have in different kinds of contracts, to lower the quality after contract award.

5.6 Summary

According to procurement theory the offers with the highest score for quality are also the offers with the lowest score (i.e. the highest) for price (Valletti, Dini, & Pacini, 2009 p 295). For all three cases this holds true, in all three cases a contract award was given to the supplier with the lowest or second lowest price. This show that these competitions was in accordance with basic procurement theory, but also that an evaluation is a combination of the price and quality element and that it is the **totally best offer** that will be awarded the contract.

Based on the theory for procurement, the fact that a good quality in itself is not enough to win a competition, is really not all that surprising. Taking into account that the guidelines for public procurement issued by the Norwegian government says that choosing **the economically most advantageous offer** should be applied as a guide for all evaluation it becomes even less surprising that price also has a large part in the evaluation. In all these cases the best total offer has been selected, with a balance between a good quality and the best price. The reason price becomes the determining factor, is not because quality is less important, but because the offered quality is so similar, price is what separate the suppliers.

Chapter 6 Expectations and influences for public procurement

6.1 Expectations to public procurement

Why do the public get so upset when what is considered the best offer, with a mix of price and quality is chosen? Why does it not seem reasonable for the government to pick the offer that delivers the best combination of price and quality? One of the reasons might be our expectations, and that our expectations are guided by the public communication for the procurement. It might be that when it is communicated up front that this will not be about offering the lowest price, but the best quality, it creates an expectation that it will be the offer with the best quality that should be awarded the offer. However by doing so, in what might be an attempt to reduce the scepticism towards contracting out public services and make it seem more harmless.

Public procurement is a part of public administration, and our demands and expectations to the level of services supplied by the government is increasing (Difi, 2019, p 13). Together with an increase in our expectations of what government services should be able to deliver, there has been a reduction in the economical room for manoeuvring and an exception of streamlining. Contracting out can be a way to save money and to inspire innovation through a new way of working that enables suppliers (either public or private) to cut costs. However it will not automatically solve the expectation from the public, for the level of services expected, and might be an explanation for the public communication of quality being the deciding factor for the purchase. Managers might see it as an important message to pass on that quality is important, as many can be sceptical to the process of contracting out and see it as a way to only cut cost.

A public procurement competition can have many conflicting goals. The internal organisation has business goals with an expectation of cutting and service delivery, while the public have expectations to the level of service the public should be able to supply. Often the level of expectations the public has, is not possible due to insufficient funding. (Schooner et al, 2008, p 4). The expectations to a procurement are connected to the goals, meaning also the expectation to what should be achieved are conflicting.

A study has shown people are biased in how they react to new information and that they react with emotions instead of logic, when presented with facts in an area they have strong feelings about (Westen, et al. 2006). This psychological fact help explain how our expectations are different and why other can see the same service as a success for some and a scandal.

Looking at how politicians have viewed these cases we see a trend were the conservative politicians, within the government, has defended these competitions and the results and both the Minister of health and the minister of Transportation has stated that they have saved the government a lot of money, and that they consider them a success. Conservative politicians have been found to focus mostly on the economy i.e. getting the lowest offer and most value for money (Alsos K, Berge, Ø, Røed Steen, 2012, p 66) which is according with their statements for these cases. For all cases politicians from Arbeiderpartiet and Rødt has raised questions with the way the competition is conducted and the high focus on cutting cost and how it will affect the workers (**Bentzrød, 2018**) ((Piene, 2018)). This also correspond with the findings of research showing that left wing politicians focus mostly on wages and working conditions (Alsos K, Berge, Ø, Røed Steen, 2012, p 66)

6.2 Stakeholders within public procurement

The use of contracting out to get the advantages of ex-ante competition can be a sensitive issue. Within public procurement there are several stakeholders often with conflicting goals. Areas within human services and raise more emotions (Domberger,1997, p 165). The cases in this paper are for ambulance helicopter and ambulance airplane services are services related to both people's health and safety. These are sensible issues and there seem to be an expectation the government will deliver the best service possible, not necessarily the economically best service, this expectation is carried forward by a public debate driven by the media and different stakeholders with conflicting goals. In all three cases there were debates about the way the procurement process was conducted, from both external and internal participants. In a public debate, the different stakeholders can have various reasons for contributing, not related to the procurement itself. The media want to sell newspapers, in addition to their social responsibility and expectancy of information to the public. This often results in a focus on what is gone wrong, and the controversial issues and less on what is good. It is the case with room for debate that gets coverage in the media, and it affects the way public procurement is

perceived. The alterteriarate motive of the stakeholders is often not mentioned and can leave an insufficient view of the situation. This affects the public and legislators' view of what is going on and how public procurement is conducted. The governmental official will defend the conducted process in their communication, the various other stakeholders within the government will have conflicting interests depending on their needs and this will affect their communication and opinions. Below, I will show how stakeholders communication for each case affects our view and expectations for the procurement. For the different comments there might be alternative motives and when possible these will be highlighted.

6.3 How did expectation and different stakeholders influence how the results of the cases were perceived?

6.3.1 Ambulance Helicopter Services

The winner of the competition was Norsk Luftambulans who also previously held nine out of twelve bases for this service. A contract award to a Norwegian supplier, who also already is supplying this service, seems to cause less hard feelings among the different stakeholders for the choice of supplier. However there were still issues, particularly related to changes in the new contract compared to the old. The difference from the old contract is that Norsk Luftambulans took over the operation of the bases Tromsø, Brønnøysund and Ålesund. A shift in the chosen supplier seems to create controversy and feelings. In the previous operation the three bases had one more helicopter than needed for daily operation, which ensured that when a helicopter was out for maintenance or unable to operate for other reasons, a backup helicopter was available. For the new contract there were some changes, and for the Brønnøysund base and the backup helicopter for Tromsø, there would be a different helicopter type. Experienced paramedics in the North claim this helicopter is less capable and would weaken the readiness. They claim there will be a reduction in capacity, reach and speed and that for the ten to twelve weeks a year this is applicable in the North of Norway these differences can be critical. In the end they admit that the operation can be conducted but has to be done in a different way than normal (Pedersen, 2016). These governmental stakeholders concerns should be seen in relation to the upcoming defence plan to move their Bell helicopters from bases in North of Norway to the South (Hansen & Rostad, 2016). This is a good example of how stakeholders commenting can have a larger agenda, wanting to influence both the public and the legislators. In this case it can be seen as a push for the Bell

helicopters to remain in the North of Norway and not be moved south. Politicians from Arbeiderpartiet have also criticised the decision of smaller helicopters as back up, and challenged the health minister to reverse this decision, which he declined, and stated that the collective readiness for air ambulance capacity for North Norway would be very good also after 2018 (Aldra, 2016). This is a good example of how different stakeholders use the media. The legislators from Arbeiderpartiet want to show their constituents in the north that they have their best interest at heart, and would fight for their readiness offer, better than the current government. The paramedics can have more than one reason for speaking out. They might not like the switch in supplier, or the fact that they for some periods of the year will have to change their working methods. It can also be to influence both the public and the legislators, to protect the helicopters stationed by the defence in the north. It is a good example, how stakeholders comment on, and uses public procurement to forward their agenda, more than it is a comment on the procurement itself. The paramedics even said that it made sense from an economical point of view and that this way of operation was possible, it was just not as good as the old one (Hansen & Rostad, 2016). When it comes to life and health, we all subconsciously prefer that the service offered is the best, from an overall socio-economic consideration this might not be viable or what is best for the country as a whole.

In in the tender documents for this procurement is was stated that a contract award for two suppliers would be preferable from a risk point of view and it opened up for choosing the second best offer to achieve this, as long as the total cost didn't increase with more than 1 percent (Luftambulansetjenesten. (2015). In the review of the offers this solution proved to be more than 7 percent higher than the best offer and was not possible. This resulted in a contract award for only one supplier, and also some changed premises for the operation. From a government management point of view this is a sensible choice. They have an expectance to apply within the rules and regulations, and to deliver the service within the budget. However for the paramedics who operate these bases, it means a change in their working conditions, they can feel less secure in their ability to get the job done, and they did not have a goal or expectation for any of this to happen. So while the managers consider their goals to be fulfilled, the end users can feel completely different. Their goal was maybe to have the best equipment available, or in this case their expectation was that their working conditions would not be altered. (Schooner et al, 2008, p 4). It is likely to assume that due to budget constrains it was not possible to chose more than one supplier and therefor the expectations of the

government end user, and maybe also part of the public was not possible to achieve (Hansen & Rostad, 2016.)

6.3.2 Air ambulance aircraft

After the contract was awarded, Frank Wilhelmsen, the managing director in Lufttransport, the company who lost the competition complained in the media that the competition was rigged. Claiming they had to give up confidential information about the cost related to wages that never should have been forwarded to the competitor. They also claimed that there should have been a condition of business transfer to ensure a fair competition (Larsen, 2018). It has been created a picture that a business transfer for this competition would be easy to implement. An assessment conducted by Wikborg Rein, raises legal concerns if a demand of business transfer have been implemented legally. In their consideration they found it could be a violation to the EEA provisions (Johannessen, 2018) One can only speculate why Wilhelmsen felt the need to go out with this information, however it can be a way to influence the opinion of legislators and the public. Many, myself included, might think of Luftambulanse as a public company, in reality they are not. There were no requests from the company prior to the competition about business transfer as part of the process, and the information shared about wages, was information the company had agreed could be shared with the other participants in the competition. Juell stated that the “competition was conducted according to the rules and regulation for public procurement and that the new ambulance flight service will be delivered on time, with increased quality, capacity and a more robust shift solution”. He also said “even if the new service was 100 million NOK above today's price, without a procurement competition it would have been even more expensive. Competition contributes to innovation in many areas, also within wage and working conditions, and to include a requirement for business transfer would exclude suppliers potential for using price and new solution as a competitive tool” (Juel, 2018). This is a good example of a government official, defending how the procurement is conducted, highlighting that it has been done according to applicable rules and regulations, the improvements and savings achieved through the competition. This is to secure the view in the public and with legislators that it has been conducted in the correct manner. Despite their public media complaints about the process, Lufttransport did not file a complaint to “Klageorganet for offentlige anskaffelser (KOFA). Babcock won the competition with a price that was 47 million NOK less than the competitor. Most of the savings was through lowering

wage and pension conditions, with 13 and 30 million NOK. This was criticized and said that it is wrong for the government to cut costs by reducing wages and pension terms (Nykvist, 2018). All the media attention created about this competition has left an impression with the public, and maybe also with legislators, that the offer who won the competition was selected purely on price. It is worth mentioning that the offer who won, was an offer with new airplanes compared to Lufttransport who offered used airplanes. One would expect that this would be considered a raise in the offered quality. Through the media coverage, largely contributed by government users of the service, such as Mads Gilbert, it has painted a picture of the new offer being a poorer offer risking the lives of the public users in the process. It is worth remembering that stakeholders can have their own agenda

In the new contract the service has never had more resources at its disposal. The spending has been increased with 100 million NOK and there are now modern propeller aircraft and a jet available. These facts seem to have been overlooked in the public debate, and are an example of how the media can prefer to highlight the “scandal” to the improvements made (Fridstrøm, 2020)

6.3.3 “Trafikpakke 1 - Sør”

The introduction of competition within the Norwegian railroad has been controversial. It was the end of an area of a public monopoly, that has raised a lot of feelings and opinions. Maybe it was to south these feelings, Jernbanedirektoratet communicated that this competition would be founded on quality and not offering the lowest price. Could this statement have been influential in pushing the public debate towards an understanding that quality would count as 100 percent (Bentzrød, 2018) Horneland, the functioning director for passenger traffic agreements, made this comment, when asked how Go-Ahead could be awarded this contract when they had offered the lesser quality compared to their competitors in the competition. He also stated that “when there was little difference in the offered quality price becomes more important”. Horneland is defending the process that has been conducted as a government stakeholder is expected to do (Schooner et al, 2008, p 17). For this case the process has been attacked from several different stakeholders. The media has written several critical articles about the process, particularly Aftenposten (see reference list), the media has a role as a public informant (Schooner et al, 2008, p 19) but also an interest to sell newspaper. Focusing on controversy and by giving room to the critical voices, add to the perception that the

competition hasn't been conducted according to applicable rules and regulations (Schooner et al, 2008, p 20-21). In one article they even went so far as claiming the competition was rigged (Bentzrød, 2019). Several politicians have also expressed their concern for the process, both in the media and through "spørretimen" at the parliament. This has mainly been politicians from Arbeiderpartiet, Rødt, Sv and SP who all can have an interest as being perceived as looking out for their constituents interest. They also have an ideological inclination to be sceptical towards the use of private suppliers (Schooner et al, 2008, p 17) (Alsos K, Berge, Ø, Røed Steen, 2012, p 66). The second runner up in the competition, SJ Norge submitted a complaint to Jernbaneverket for this competition. In their opinion the competition had not been according to the rules and regulations for public procurement (SJ Norge, 2018). In their complaint they stated the evaluation of quality was not conducted according to the requirement of predictability and questioned whether the evaluation is in compliance with the principles of equal treatment, predictability and verifiability in the Public Procurement Act (LOA § 4), claiming that no real negotiation was conducted and stated that the offer from Go-Ahead, should have been rejected as an offer priced very low or tactically priced held up against performance (Go-Aheads offer was 21 percent less than the number two in the competition). Jernbaneverket rejected all claims. They pointed out that the offered quality becomes similar in a competition with negotiation, price is an award criteria and a low price a competitive advantage. (Slotsvik, K. L.) Sj Norge is a private stakeholder and can have different motives to complain to Jernbaneverket. Their motivation could be influenced by the knowledge of future tender competition, sway of public opinion, or legislators. The evaluation for this procurement did have a wider spread in the awarded scoring for quality criteria. The Minister of Transportation considers this competition to be a great success even before it has started. He has publicly announced that the introduction of competition within the railroad operation will allow the government to save billions (Nissen, 2019). His goal has been to end the monopoly of governmental railroad operation, contribute to innovation and cut cost. When we view his expectation of what he wanted the procurement to achieve from a theoretical view it is not hard to understand why he think it is a success. The union however, disagree with his assessment and claim that the introduction of competition will raise cost and allow for foreign companies to make a profit, money that could have been spent improving the public railroad system. They have other goal and a different focus than the current minister of Transportation. Their focus is job security and working conditions (Nissen, 2019) What the minister considers a success because the procurement on paper has resulted in massive savings the union and also politicians from socialistic parties claim this is a destruction of the

railroad. They consider this to be a way to privatise the operation of the Norwegian railroad. The public's view on this will be dependent on their personal ideology, and if they are an end-user to this service. If the service remains the same or better, the public as an end-user can end up being happy with the change. If the change offers any personal changes that they find to be negative, this will affect their view of the competition.

6.4 SUMMARY

The goal each stakeholder has influences their expectations for what a public procurement competition should be able to achieve. It is not only the procurement of the product or service itself but also an expectation of a deliverance covering the different stakeholders' expectations. These expectations and goals are often conflicting and it is not possible to fulfil them all. Each of the different stakeholder groups will fight for their own interest, and this is important to remember when following the public debate. Our judgement can be clouded by our emotions and personal beliefs, and prevent us from seeing the facts. It can be easy to see things only from one side, and to get sympathy with people's fear of losing their job, or agreeing that the equipment supplied in life-saving operations should be of the best quality available at all times. Some can think it is wrong for public funding allowing public suppliers to make a profit claiming that this money could have been better spent giving the public even better services, while others say that the introduction of competition enables both better services and cost reduction. It is hard to say which is correct, most likely both sides have valid points. Our view on the results become clouded by all the different stakeholders fighting for their interest, and it can often through the media be portrayed differently than what it is. All these cases have generated a lot of debate, politicians and governmental end users have announced their disapproval with the choices made.

The main goal of public procurement is to supply the service or product needed in a timely manner at the best value. An evaluation is conducted according to predefined rules, and even if the winner of the competition is an unexpected supplier, according to the rules and regulations of public procurement it is not possible to make changes to the outcome of the evaluation. They are also bound by budgets awarded by the government and does not have unlimited spending, and has to make choices according to this. All these procurements did offer substantial saving in cost, while supplying a good quality, despite the public debate who

made it out as if quality has been sacrificed for a low price. In none of the cases there are any evidence to support this. What there is evidence of are stakeholders fighting to promote their own interest. A public procurement should be measured based on its own merits and not on what each stakeholder group wanted the procurement to supply to them.

Chapter 7 Conclusion

Discussions about public procurement and how public funding is spent offers several opinions. The debate about contracting out as a governance model is polarised, which is shown in the public debate about the results achieved through some of the competitions conducted in the latter years. In order to have a constructive debate it is important to look at all the facts and not only facts supporting what we want to see. Part of my motivation for writing this paper was that I had gotten an impression through the media that quality had been sacrificed for a low price. Despite the governments public comments that quality would be the deciding factor, the offers with the lowest price was awarded the contracts. I wanted to explore if this was the case, and I have to admit I expected my findings to be different. During my research I realised that all procurement was conducted according to the rules and regulation, but also that the result was as one should expect based on procurement theory. It got me thinking, why do we have different expectations for public procurement? Why do we think it is wrong to make a balanced evaluation of cost vs quality? Some even think it is a scandal when the offer with the most economically adventurous offer is chosen instead of the one with the best quality. The economic factors, for instance that the offer with the highest ranked quality, seem less important in this debate, and I wanted to explore what influences our view.

7.1 The relationship between price and quality

Theory about procurement concludes with the opposite, the highest quality comes with the highest cost (Valletti, Dini, & Pacini, 2009 p 295). Still for procurement that are connected to public safety and health, we seem to have another expectation for what we want the government to offer us in terms of quality. There is an expectation that we deserve the best possible quality and when reading the papers, who focuses on what has gone wrong more than what has gone right it can be easy to draw quick conclusions that quality was offered to save money. The of breaking a monopoly for the operation of the Norwegian Railroad and the the introduction of competition is a sensitive issue. The debate is often coloured by our personal view and not of the facts. The first impression for all the cases within this research, was that

the lowest price won and that despite quality having a higher weight. Despite the public communication that quality should be the determining factor, it left an impression that the opposite was happening by reading about it in the newspapers. Throughout this research I discovered that the truth is more nuanced than what we read in the papers. We all know this, and still it is easy to accept what is written as the truth. It is also easy to let our own personal beliefs colour the information we read, and that often stops our ability to be objective.

The first research question for this paper was:

What are the relationship between price and quality in an evaluation and how is it affected by the choice of procurement procedure? Is quality being sacrificed for a low price?

In a competition with negotiation the offered quality will become very similar, this will make the offered price more important for suppliers to be able to distinguish themselves. The price is dependent on several different factors and it is up to each supplier how much they will sacrifice their profit, how much they are able to streamline their operation or how innovative they are able to be to cut cost. This does not mean that quality is being sacrificed for a low price. The use of mandatory criteria can ensure that the offered quality from all suppliers is at an acceptable level even before the evaluation begins. Through negotiations suppliers are guided closer to what is considered to be the optimum quality, and the offered quality from suppliers becomes very similar and hard to distinguish in an evaluation. In these kinds of evaluation, I would claim that it is through offering a high quality, close to the desired optimum, that allows suppliers to be in the final round. When one criteria becomes similar, the remaining elements becomes more important for the outcome without taking away the importance of the first element. It just means that since all suppliers have done an equally good job offering a high quality, the price ends up being what is the determining factor but in a different way than the first impression left me to believe.

My findings are from a procurement view as expected. It is not revolutionary that price ends up being the deciding factor, what is interesting is how our expectation seem to be that the best quality independent of price should have determined the competition.

7.2 Why do we have different expectations for public procurement and how are these expectations influenced?

Public procurement is not only bound by a more ridged set of rules and regulation than for a private company. The rules and regulation gives procurement different considerations that affect the way it is conducted from the beginning. These rules also affect our expectations to the results.

For a private company their procurement will have an expectance to help the company make a profit and to get best value for their money, the government is expected to find the product or service that offers the best value for money, and in addition they are expected to uphold a variety of different criteria satisfying the multiple stakeholders. The different stakeholders are both external and internal, and they all have an expectation for the public procurement to fulfil their personal needs and wants, in addition to the needs of the procurement.

Their focus on the public procurement process is not only just about the choices made for the procurement, it can also be a means to an end. In the cases for procurement of Ambulance Helicopter Services and Air ambulance aircraft, there were massive critics from the paramedics using the service. Their critic can be legitimate and valid, however it is also important to know that they can have alterative motive for their critic of the public procurement result and the choices made. In one of their interview even stated that “they could understand the decision from an economical point of view, but it would require for the rescue team to work in another manner when the back up helicopter had to be used.” The working conditions for paramedic and rescue personnel are important, the decisions made for procurement has to be based on a full picture of what will offer the best total service. It is not uncommon that what is the best overall choice can for some users seem like a bad decision. Their statements can also be seen as a way wanting to affect the armed forces decision of moving their Bell helicopters to the South of Norway. These helicopters were at the time part of the ambulance services readiness and stationed in the North. For the decisions made for a public procurement competition, this information is not relevant unless it was part of the evaluation and overall strategy for the procurement. For the paramedics, criticising the

choices made in procurement can be a way to sway the opinions of the public and legislators to help influence the decisions of the location of those helicopters, and stop them from being relocated to the South of Norway.

For all three cases the government officials responsible for the pronouncement are defending the process, and concerned with showing that it has been conducted according to the rules and regulation for public procurement. While a private company will measure if their procurements adds value, public procurement is bound by budgetary constraints awarded by politicians. This is shown particularly in case 2, where there were strategic considerations for the services that it was not possible to include due to budgetary constraints. How this impacted the performance under the contract and the readiness for the population is impossible to say.

The legislators have used these cases to push their own agenda, in order to look good for their constituents. The government has defended the competitions, and the process. Particular introduction of competition within the railroad has been an important project for the conservative government, who see contracting out and also privatisation, as an efficient way to modernise the public sector. Their communication focuses on the theoretical savings, often presenting them as money already saved. In reality no one can tell what the actual savings will be before the contract is finished, and even then it can be hard to determine if the conditions have changed. That however is a subject for another paper. The opposition will and have used these cases to front their view of competition weakening quality and wage and working conditions.

The media coverage of public procurement does without a doubt affect the way the public view the services and process, and one important thing I learned writing this thesis is that the impression you get from the media, might not be representative of the process that is conducted. This is not to say the media doesn't do an important job, keeping the public informed and holding the government and other organisations accountable. It is just important to be mindful of the fact that everything might not be as objective as we assume.

As research did show, our personal view will inflict how we view matters, and instead of finding the best solution.

The second research question for this paper was

Why do we have different expectations for public procurement and how are these expectations influenced?

Our expectations to the results possible for public procurement, is influenced by our personal beliefs of contracting out as a form of governance. Those who view this as a positive contribution and a way for the government to cut cost and offer better services, will look at the outcome differently, than those who fear that this is a subtle way to privatise public services. As research showed, we look for evidence that support our own beliefs. Those positive will emphasise on the communication from government official stating the procurement has been a success, offering better services for a lesser cost. The ones who are sceptical will be inclined to listen to those claiming the procurement haven't been conducted according to applicable rules and regulations, that it has sacrificed quality to cut cost, that the conditions for workers has been weakened.

Different stakeholders partaking in the public debate, each wanting to promote their own agenda, fuel all of these expectations. The public debate has the power to influence our view more than we often realise. The newspapers strive to sell more papers, and "scandal" sells. So they have a their own reasons to give room for the critical voices. I think we often look for the perfect answer, but the truth is often somewhere in between.

7.3 Weaknesses with this paper

This paper is conducted on the basis on limited information. Preferably an analysis of the relationship between price and quality should have been built on the evaluation model and the way the evaluation was conducted. However all three cases had classified this as an internal document and did not grant access to it. The analysis in this paper is conducted on the data after the final offers were submitted, this does not show the progress in the offered quality and price offered from suppliers nor does it give any insight on the offers who didn't make it to the negotiations. The development in the offered quality and price would have been useful to

map could have offered more insight on how competition with negotiations as a procurement procedure influences the development in the offered price and quality.

The interview conducted for this paper was conducted as structured interview by email. In order to increase the likelihood for responses, I choose to limit the number of questions asked. A face-to-face interview would have allowed for a more unstructured interview, and could have offered more insight about the process for each case.

I chose case study as a method for this paper in order to get in depth knowledge of the relationship between price and quality in evaluations. The three cases offer insight of evaluation mechanisms, particularly for the procurement procedure competition with negotiations. However the findings are only indications, and in order for them to offer general insight a more thorough research based on quantitative material should be conducted.

7.4 Further research

During the work with this paper several areas for further research has been discovered. Some of them I would have liked to include in this paper but time restrictions prevented this.

The first I would recommend to investigate is how the offered price and quality develops through the negotiation. This could offer useful information on the effect of the negotiation on the offered price and quality.

Another area of research would be to conduct a quantitative study to see if the difference in scoring for quality is statistically less in a competition with negotiations compared to other procurement procedures. Is it a trend for within all procurement procedures combining the evaluation for price and quality, that the difference in score for quality is less, or is this connected to the procurement procedure?

I would also have liked to investigate why none of the suppliers who publicly claimed that the process had not been conducted according to the rules of public procurement felt the need to report this matter further to KOFTA? Was it because the process is too time consuming, did they not really think the process was wrongfully conducted or was there other reasons for them not reporting it?

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APPENDIX

Forespørsel om å delta

Mitt navn er Anne Cathrine Ervik og jeg tar en master i økonomi , med spesialisering innen Strategi, ved Universitetet i Stavanger.

Jeg skal skrive en master oppgave om evalueringskriterier ved offentlige anskaffelser, og se nærmere på vektingen mellom pris og kvalitet.

Anskaffelsen av x er en av fem offentlige anskaffelser jeg har valgt å skrive om, og i den forbindelse hadde jeg satt veldig pris på om du har anledning til å svare på noen spørsmål angående denne anskaffelsen på mail?

All korrespondanse vil selvfølgelig bli slettet når master oppgaven er levert og du vil ikke bli identifisert ved navn i oppgaven.

Håper dette er noe du har tid til å bidra med og ser frem til å høre fra deg.

Med vennlig hilsen
Anne Cathrine Ervik
tlf: 98669790

Intervjuguide

1. Hvilke vurderinger gjøres før man velger vekting mellom pris og kvalitet?
2. Hva var avgjørende for den vektingen man valgte?
3. Ble det gjort noen matematiske utregninger for å komme frem til vektingen?
4. De poengmessige forskjellene for evaluering av kvalitet blir ofte små, mens for pris gir det større utslag. Har du gjort deg noen tanker om hva dette skyldes?
5. Det har blitt sagt at i en anbudskonkurranse med forhandling vil forskjell på kvalitet gir mindre utslag på score. Er dette noe du kjenner deg igjen i og har du gjort deg noen tanker om hvorfor det er slik?
6. For anskaffelser med kvalitet som det tyngst vektete kriteriet, er det allikevel ofte det tilbudet med lavest pris som blir valgt. Hva mener du kan være grunnen for at pris allikevel ser ut til å være den avgjørende faktor?