Master's degree thesis

LOG950 Logistics (Supply Chain Management)

Contract management strategies in public procurement

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Preface

This thesis is a fulfillment of the final requirement for the Master of Science in Logistics with specialization in Supply Chain Management at Molde University College. The thesis research topic was motivated by my interest for better procurement management practices. As public sector spending on procurement continues to grow better contract management and practices are required to safeguard public money and quality delivery of public goods to citizens. Good contract management can achieve value for public procurement.

I gained valuable information from real life experiences narrated by the research participants. I am grateful to the anonymous participants for sharing their knowledge and experiences. This research study would not have been complete without their contribution. I appreciate the professional support and academic guidance of my supervisors, Professor Per Engelseth and Geir Arne Svenning. Their knowledge and passion for the purchasing subject is unmatched. Per and Geir made the writing of this thesis an enriching experience. Deodat Mwesiumo and Richard Glavee-Geo gave me the push in my studies and showed me the way when I needed the push. Thank you Deodat and Richard.

This thesis is dedicated to my parents, my mother Mary Nyambura Mwangi and my late dad. My parents believed in me, showed me the way and supported me in all ways possible. Thanks mum and dad for all your love and support. I am proud of you. Dad I still hold on to the promise. Joyce Wairimu Maina, thank you for your encouragement, hatuendi mahali. I cannot forget to appreciate the late Wellington A. Mathenge. All is well. Your encouragement, support and total love paid off. I accomplished. I know you are proud of me in heaven. Mwalimu Mrs. Lucy Maina, this is for you too. Thank you for the long inspirational moments, encouragement and prayers. You made me believe. Mwalimu I use your words, "Andū akūrū matigūaga igeranio. Gūtīrī ūndū ūtarī mūico. Githomo no gīgathira". Githomo nī ndarīkia mwalimū.

I thank all the people not mentioned and who have been with me in the journey to make this study a success.

Charles Nguyo Mwangi October 2018.

Abstract

In 2016, the total spend in public procurement in Norway was NOK 500 537 billion. The purchases were 16% of the GDP, and an increase of 4.8% compared with the previous year. This spend signifies the importance of public procurement. With increasing population and defragmentation of the public sector to better provide public goods, public spending on procurements is bound to rise.

This research found that public procurement professionals in the studied organizations are good to operationalize contracts but fail to match the same enthusiasm to monitor and manage suppliers. Contract management strategy is well formulated but poorly implemented, yet it is in the contract management phase of procurement that consumption of procurement takes place. It is in contract management that 95% of procurement budget is spent. Poor purchasing strategy, understaffing in procurement departments, lack of competence and skills among procurement staff, inability to understand contracts, duplicated contracts, poor reporting systems and arm-length relations with suppliers are the contributors of poor contract management in the public organizations studied.

The study proposes that the organizations can improve on contract management through availability of resources by employing enough staff with skills and competence to understand and implement contracts, strategic and collaborative relationships with suppliers, strategic purchasing practices such as category management, increasing performance monitoring, using technology to monitor suppliers, computerized update of contract variations to update contracts to reflect what is happening on the ground, proper documentation and transparent reporting systems. The organizations should take advantage of the innovative Public Procurement Act of 2017 to incorporate innovative procurements for effective and sustainable service delivery. Through sustainable procurement organizations acquire goods and services which not only add value to the organization, but also to the society by reducing wastes and improving efficiency of resources while reducing risks to the environment.

Keywords: public procurement, public goods, contract management, strategy, strategic purchasing, category management, innovative, sustainable

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List of abbreviations

DIFI Agency for Public Management and eGovernment

DOFFIN Norwegian National Notification Database for Public Procurement

EU European Union

GDP Gross Domestic Product

KOFA The Norwegian Complaints Board for Public Procurement

TCE Transaction Cost Economics

1.0 CHAPTER 1: INTRODUCTION

The chapter sets foundation of the thesis by presenting the research problem background and purpose of the thesis by outlining the objectives and significance of the research study. The chapter ends with a presentation of the thesis structure.

1.1 Research background

Procurement in the government has expanded to include paying the private, non-profit, or other governments to undertake a spectrum of functions which alternatively are the governments mandate. Governments contract for educational services, policing, refuse collection, social services instead for producing in-house. By contracting, public organizations access economies of scale, cost savings, bypassing costly labour and supply requirements and profit from efficiency through competition incentives (Brown and Potoski, 2003a).

In 2016, the total spend in public procurement in Norway was NOK 500 537 billions (Statistics Norway, 2017). The purchases are 16% of the GDP, and an increase of 4.8% compared with the previous year (Statistics Norway, 2017). This spend signifies the importance of public procurement.

There is rising dissatisfaction from increasing incomplete, failed, and corrupt contract arrangements. It is argued that contracting in government is accompanied with accountability problems, sacrifices service quality and does not always result in improved efficiency and savings (Brown and Potoski, 2003a). The success of procuring depends on how well organizations manage the contracting process, from feasibility, through implementation to monitoring and evaluation. This requires strong contracting capacity (Brown and Potoski, 2003a). The Norwegian Auditor General's report of 2010-2011 (Brynhildsvoll, 2018), informs of breach by the public sector to conform to regulations. The Auditor General points at lack of competitive bids as the most common breach. This is explained by lack of competent procurement staff, poor leadership, poor control and organization. Procurement staff are good to sign and operationalize contracts but lack the same enthusiasm in to monitor that deliveries, invoice price and guarantee are according to the contract (Brynhildsvoll, 2018).

A multiple case study was undertaken to investigate how two public organizations in Norway conduct contract management. For confidentiality purposes, the names of the two organizations and the informants are anonymized. The organizations are referred as Organization A and Organization B in the study. The case aimed to study the activities and strategies employed contract management in public procurement. The two organizations were therefore selected by their membership as public institutions. Public institutions in Norway fall under three classes of governance; municipalities, counties and the national government. Two institutions were studied. The first organization is in the health sector and under the national government and will be referred to as organization A in the research. Organization A is in a transition process after consolidating its procurement functions to form a purchasing cooperation with other health organizations. It has new structures in procurement.

Organization two is a municipality in the same region of west coast Norway. This organization is referred to as Organization B in the case study. Organization B has lately been in the public domain for breach of regulations in the Public Procurement Act. Several cases for breach have been forwarded to KOFA and have been resolved, whereas others are still unresolved. The cases involve among others direct procurement without competitive bidding, bribery, nepotism, discrimination when evaluating offers and breach of the Work Environment Act in procured services (KOFA, 2018).

In 2017, the Norwegian Complaints Board for Public Procurement (KOFA) resolved 43 cases found to have breached the regulations of the Public Procurement Act. By the time of writing this thesis, 25 such cases had been resolved in 2018 alone (KOFA, 2018). This proves that disregard and negligence of good purchasing and procurement practices is prevalent in the public sector. Transparency International names public procurement as a vulnerable area where corruption can thrive (Transparency International, 2016), and regards having a clear procurement strategy and control of deliveries as one way to avoid corruption.

1.2 Research gap

The main aim of the research is to find out how contract management in two public organizations is conducted to fulfil the obligations and the objectives as required in a contract. The study also explores theoretical perspectives of contract management as

outlined in the frame of reference in chapter two, and using the reference seeks empirical evidence from the findings.

Purchasing performance and minimization of purchasing costs is important in determining an organization's competitiveness (Noordewier et al., 1990). Purchasing management is a key area towards success of purchasing performance. Purchasing management is described by van Weele (2014) as all activities necessary to manage supplier relationships in such a way that their activities are aligned with the company's overall business strategies and interests.

The relationship between the public sector as the contractor, where the contractor is supposed to monitor what is happening in other organizations, calls on the contractors knowledge of the relationship with the suppliers (Pettersen, 2012), and managing these relationships towards effective goal achievement. The public sector operates under a complex structure with different objectives and complexities arise on how to manage and coordinate relationships (Pettersen, 2012).

Literature review revealed few literature that seeks to address contract management strategies in public procurement in Norway. Balaban (2016) in their study fall short of defining the measuring tool in their study as contract management. In their research Balaban (2016), highlight how "Norway can implement a reliable measuring system to streamline its investments and procurement" and suggest for a measuring tool for public procurement. In their study, "Challenges of supplier selection methods in public procurement" Strømme (2016) fall short of highlighting contract management. Strømme (2016) call for simplification of contract award criteria and the procurement process. Kim (2015) in their research found that intensive fair monitoring and government management capacity contribute to effective financial contract performance, whereas long contracting relationships and two-way communication between contractors and suppliers, and welltrained contract managers contribute to improved financial accountability. Simila (2010) investigates relations between business management and contract management in four private sector organizations. Hawkins and Muir (2014) in their research to explore knowledge-based factors affecting procurement compliance in the U.S. government posits that buyer experience, sufficiency in defining service requirements, enough procurement

lead time and post-award buyer supplier communication as some of the factors affecting compliance and fall short to describe this as contract management.

The literature review proves there is a lack of enough research studies of the Norwegian public procurement context that address the subject of contract management. This study has in its objectives to reduce the research gap.

1.3 Objectives and significance

In the research gap it was found that few studies address contract management activities and strategies in public procurement in the Norwegian public sector. Through exploratory case studies this study investigated the phenomenon of performance of contract management by interviewing procurement staff in two public organizations and relying on the concepts in the frame of reference developed from the literature in chapter two seeks to find out the empirical grounding of the concepts by relating theory to the empirical findings. To achieve this, this thesis seeks to answer the following two research questions:

- i. What activities and strategies do public organizations perform in undertaking contract management?
 - To be able to answer this, procurement staff in the two organizations were interviewed to give their perspectives on how they carry out the phenomenon of contract management. This leads to the second research question,
- ii. Is contract management practice among public organizations in line with theoretical perspectives?

To answer this, a summary of literature review and theoretical perspectives discussed in chapter two is put into a frame of reference. The frame of reference is applied to explore the findings in the first research question and find the interplay between the findings and theory, and to bring out information about the phenomenon of contract management. The frame of reference has namely the following concepts; strategy, legislation and regulations, managing stakeholder interests, supplier performance and relationship management, procurement staff competence and skills, innovative procurements and managing risks.

By answering the above research questions, this thesis can be beneficial to:

- To procurement professionals in contract management as it contributes to knowledge and improvement in management of the process improving their reputation as managers of public resources.
- To academics and researchers with an interest in purchasing and procurement management

1.4 Thesis structure

This thesis is divided into five chapters. It starts with an introduction, theoretical framework, research methodology, findings, and ends with discussion and analysis.

Figure 1 illustrates the structure of the thesis and the linkages. The illustration is meant to make it easier for the reader to follow the flow of the study.

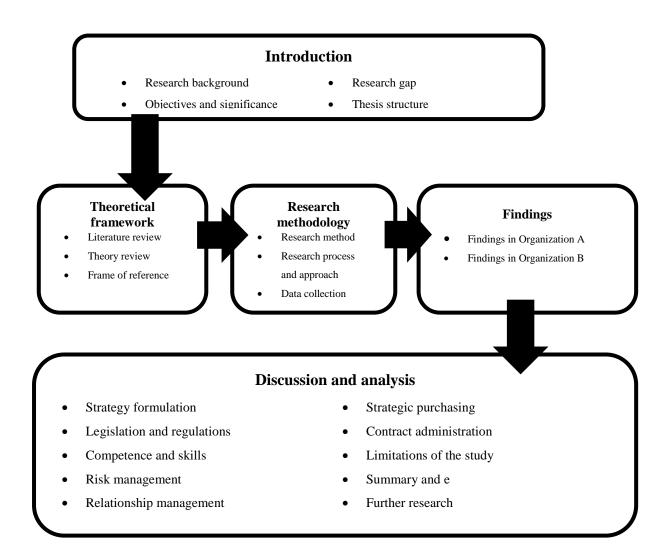


Figure 1: Structure of the thesis

2.0 CHAPTER TWO: THEORETICAL FRAMEWORK

Contract management is about follow-up of the process of acquiring goods and services in conformity with the policies and regulations that guide the process. It is an interactive process where relationships are built, and resources are needed to successfully manage the process in terms of time, monetary and knowledge capital. This chapter discusses literature in contract management. Literature on purchasing and procurement, and theories applicable in performance of contract management are discussed. These theories are transaction costs economics and relational contract theory.

2.1 Literature review

This chapter presents a literature review of purchasing, procurement and contract management. Risk management is also discussed and overlaps the three topics.

2.1.1 Purchasing management

In their work (van Weele, 2014) describe purchasing management as all activities necessary to manage supplier relationships in such a way that their activities are aligned with the company's overall business strategies and interests. van Weele (2014) argues that purchasing policies and strategies should be based on a company's overall objectives and product/market strategies. To achieve this, purchasing managers should consistently adapt their purchasing management processes. Purchasing performance and minimization of purchasing costs is important in determining an organization's competitiveness (Noordewier et al., 1990). Purchasing management is a key area towards success of purchasing performance.

To ensure supply at competitive cost and to cope with risks associated with supply disruptions Kraljic (1983) suggests a change of perspective in purchasing management: from purchasing as an operating function to strategic supply management. Purchasing should not be managed in isolation with from other elements of business systems (Kraljic, 1983). Kraljic (1983) posits for cross-functional integration and top-management involvement with the purchasing organization, effective organizational relations, systems support and upgrading the skills of the purchasing people. Integration of purchasing with other functional areas impacts on cost, quality, time, technology and improved customer satisfaction (Trent and Monczka, 1998). Gone are the days when purchasing was a neglected function because top-management believed it was not a core function. Procurement was in earlier decades not

viewed as a source of competitiveness and was regarded as a negative function (Trent and Monczka, 1998). However this has changed and executives view purchasing process as important in achieving an organization's strategic goals and objectives (Trent and Monczka, 1998).

2.1.1.1 Strategic purchasing management

Bedey et al. (2009) in their description define purchasing management "as the concept of managing strategic purchasing", and go on further to define strategic purchasing as, "the process of planning, implementing, evaluating, and controlling strategic and operating purchasing decisions for directing all activities of the purchasing function toward opportunities consistent with the firm's capabilities to achieve its long-term goals" (Bedey et al., 2009, quoting from Carr and Smeltzer (1997)). A purchasing function is strategic when it is proactive, integrative and has a long-term focus (Carr and Pearson, 2002). In strategic purchasing professionals have the right knowledge and skills and receive professional training to improve their skills, have access to key information vital to making purchasing decisions, and perform proactive activities to interact with others within and outside the firm (Carr and Pearson, 2002). Bedey et al. (2009) go on further and have conceptualized a purchasing management model, Figure 2 that visualizes the purchasing function and its interaction between internal and external business network comprised of activities, resources and actors.

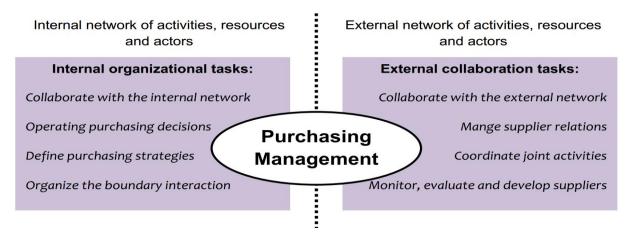


Figure 2: Conceptual model of purchasing management (Bedey et al., 2009)

The business network is the network of activities, resources and actors (Bedey et al., 2009). The business network on the internal side consists of activities which are internal processes

within the organization and the resources owned by the organization. Employees or departments within the organization are the internal actors. On the external business network, supplier activities between different actors as competitors, customers and suppliers represent external activities. Suppliers, customers and competitors own the resources while the external actors are primarily suppliers (Bedey et al., 2009).

The public sector faces complexities of political interferences and myriads of written procedures and system (van Weele, 2014). The biggest expense after wages in the public sector is purchases (Difi, 2018a). Purchasing agreements entered on behalf of the government should be good for the government, the citizens who are the users and the suppliers. This puts responsibility on purchasing professionals in the public sector to get the most out of public funds (Difi, 2018a). Purchasing strategy should be established, anchored and followed-up. Without a relevant strategy procurement will not be on the management agenda and management will not prioritize resources (Difi, 2018a).

Statistics from the Office of the Auditor General in Norway (Difi, 2018a) show that the public sector does not prioritize targets on procurement thus losing out on potential efficiency and gains which could be realized. Public organizations do not see the connection between their strategies and procurement in the same context. There is lack of reporting on key figures in purchasing, follow-up and assessment of purchases done. Thus little evidence exists from procurement work in terms of savings, quality and public satisfaction (Difi, 2018a). The Public Financial Regulation on Procurement states, "The business shall establish systems and procedures that ensure that procurement of goods and services takes place in an efficient and responsible manner (Difi, 2018a)."

Research proves that strategic purchasing and purchasing management have positive impact on the financial performance of an organization (Carr and Pearson, 2002). Most organizations spend a large amount of their income on purchases and recognize the importance of strategic purchasing management. There is a link between purchasing management, supplier involvement, strategic purchasing and a firm's financial performance (Carr and Pearson, 2002). Purchasing strategy should be part of a firm's corporate strategy (Carr and Pearson, 2002) and purchasing management should be handled at a strategic level within the corporate organization, and the purchasing department should be treated as important in an organization.

2.1.2 Public procurement

Public procurement refers to, "the process by which public authorities, such as government departments or local authorities purchase work, goods or services from companies (European Union, 2017)". Odhiambo and Kamau (2003) further define public procurement as about purchasing, hiring or obtaining by any contractual means of goods, construction works and services by the public sector, when such acquisition is effected using funds from state budgets. Wittig (1999) differentiates public procurement from private procurement by stating that, unlike private procurement, public procurement is measured against long-term criteria, has considerations of the economy and international obligations, is subject to enacted regulations to protect public interests and is a process within a political system with significant considerations of integrity, non-discrimination, national interest and effectiveness.

Public procurement is the bridge between public requirements such as roads, hospitals, defense equipment etc. and private market (Wittig, 1999). Public procurement affects the society. For public procurement needs to be considered by a supplier, they must be expressed in clear terms, be in line with existing public policies and be transparent. The procurement process should encourage suppliers to value government business and supply quality goods and services, at satisfactory price and in good time (Wittig, 1999). Public procurement should encompass processes to see all the government's requirements to the end of the contract.

Public procurement is a regulated process, controlled by numerous laws, rules, regulations, judicial and administrative decisions, policies and procedures (Naude et al., 2013). Policies in public procurement are informed and constrained by specific circumstances, for example the need for accountability, the fact that public organizations are not subject to the rules of the free market and the necessity for stringent financial management procedures in government (van Weele, 2014). The many regulations restrict how and when public buyers interact with suppliers (Davis and McKevitt, 2014). Legitimacy of procurement decisions overrides efficiency and public organizations are primarily procedure driven in contracting activities rather than performance driven (van Weele, 2014). Public procurement is less focused on relationship building, focusing more on obtaining lowest price possible, very risk

averse and relies on competitive tendering rather than relationships (Davis and McKevitt, 2014).

Most public procurement is done through a tendering process, i.e. a binding offer to perform specific job, deliver goods and services according to a buyer's specified terms and conditions (Suarishvili, 2016). Tendering encompasses market research, developing a sourcing strategy and specifications for the goods and services to be supplied, preparing tendering documents which includes technical specifications, supplier selection and award criteria, contract conditions, evaluation of suppliers, entering into a contract and follow-up procedures (Suarishvili, 2016).

Public procurement professionals are good at procuring according to the procurement regulations, but lack the same enthusiasm to the implementation and delivery after the contract is signed (Difi, 2016). Legitimacy of procurement decisions overrides efficiency and public procurement is procedure driven rather than performance driven, relies on competitive tendering and focuses more on obtaining the lowest price possible (van Weele, 2014). In the recent, there is strong focus on public procurement procedures and procurement that conforms to the regulations. Decisions and complaints to the Norwegian Complaints Board for Public Procurement (KOFA) has made contract management an important focus area (Difi, 2016). The change in culture and attitude whereby contracts were regarded as just paper documents, rather than considering contracts as instruments to achieve successful purchasing has put more emphasis on contract management.

2.1.2.1 Public procurement in Norway

Public procurement in Norway is regulated by the European Union (EU) which is supplemented by the Public Procurement Act on public procurement which came into effect on 1st January 2017 (Trygve, 2018). This is in conformity with Norway's obligations under the European Economic Area (EAA) Agreement. The new act is meant to secure effective use of resources, and to simplify the procurement process which procurement people regard as too formal, over-detailed and complicated. The act allows for use electronic communication in the whole process, which simplifies the tendering process both in Norway and in the EU. The amount of documentation required from buyers and suppliers during tendering has also been reduced with the introduction of a single self-declaration form, the European Single Procurement Documentation (ESPD). Other laws which are of consideration in procurement in Norway are:

- Sale of Goods Act
- Contracts Act
- Competition Act
- Work and Environment Act

Among the laws mentioned above, only the Public Procurement Act which is central will be discussed. The Work and Environment Act is predominant with procurement and features in both the Public Procurement Act and EU regulations on public procurement. The Norwegian Ministry of Trade, Industry and Fisheries has main responsibility to oversee and regulate public procurement.

The public sector procures goods and services worth about 16% of the GDP. Of this procurement, the municipalities procurements consist about a third (Brynhildsvoll, 2018). Public procurement is projected to grow by 5-8% every year.

2.1.2.2 The Public Procurement Act

The public act on public procurement is applicable to the following employers, or contractors (Ministry of Trade Industry and Fishing, 2018):

- All state authorities, including state directorates, departments and all national organs
- All county and municipal authorities, including schools, hospitals and care centers
- All parastatal bodies
- Any merged public bodies

The act covers the procurement of goods, services, construction work, planning and design contracts whose value is equal or more than NOK 100,000 excluding VAT. A contract for goods covers purchases, hire purchase, leasing or rent, installation or installation work of a product. Service contracts cover the performance of services. Construction contracts cover building and construction activities intended for economic or technical functions. Planning and design contracts cover procurement activities which enable the client to obtain planning or design work of a project (Ministry of Trade Industry and Fishing, 2018). The Public Procurement Act is consists of four regulations covering different sectors (Trygve, 2018):

 The Public Procurement Regulation: Covers procurement of goods, services and works by public contracting authorities

- The Defence and Security Regulation: Covers procurement by the Ministry of Defence
- The Utilities Regulation: Covers procurement of utilities in the water, energy, transport and postal services
- The Concessions Procurement Regulation: Covers concessions by contracting authorities or utilities

By definition, the government (Ministry of Trade Industry and Fishing, 2018) defines what qualifies as a contract as a binding mutual agreement between one or more contractors, and should be in written form and documented. The minimum qualifications for such a contract should be:

- Both contracting parties must have reciprocal obligations which are mutually dependent on each other
- For the contract to qualify under the procurement act, a direct economic benefit must accrue to the contractor, and the supplier is entitled to remuneration
- Nature of the service and how it is to be performed should be specified in detail
- The public contractor should take the initiative to find a supplier through a competitive process
- The contract should contain remedies for breach

A report by the Office of the Auditor General (Norge Rikrevisjonen, 2011) found that in the period between 2006 and 2008 there were 1 196 cases of breach of the procurement regulations. The cases range from breach of competitive tendering, not following protocol, lack of documentation, lack of tax certificate and contravention of HSE regulations.

The public procurement act defines three procurement value thresholds which fall under the regulations. Procurements with value of less than NOK 100,000 are excluded from the documentation and protocols of the procurement regulations. However, prudence should prevail, and the contractor should in a manner that which ensures confidence of the process, ensuring competition and efficient use of resources. Good internal routines and financial management hinder corrupt practices. For procurements over NOK 100,000 excluding VAT, and below NOK 1.3 million excluding VAT, there is requirement for procurement protocol, no requirement for notice be, but it is advised that such a procurement should published by a contract notice on Doffin, the Norwegian national database for public procurement (Difi,

2018a). Contracting authorities are bound by the principles of competition, equal treatment, non-discrimination, transparency accountability and proportionality (Trygve, 2018). The Procurement Act fronts for efficient use of public resources, integrity of public entities, public confidence and trust, and fight social dumping (Trygve, 2018). A question which often comes up is how the procurement is calculated.

2.1.2.3 Procurement value thresholds

The procuring authority must undertake a justified valuation assessment of the value of the purchases to assess whether they are above or below the relevant value thresholds, and to establish which rules apply to the purchase. It is important that incase the total payments made in connection to a contract are above the estimated value, there is a justifiable ground. The rules for calculation of value thresholds are applicable to both the Norwegian and the EU thresholds. The purchase value is based on the total payments excluding VAT, but which include payments, options or premiums to the supplier. It is prohibited to split up a contract with the intention to circumvent the rules. This prohibition however does not, based on reasonable grounds, dissuade the contracting authority from splitting up a contract into subcontracts which individual suppliers can tender (Ministry of Trade Industry and Fishing, 2018).

There arise critical questions regarding several purchases against contract and the total threshold value in fulfillment of the regulatory framework. In some purchasing organizations, there are different entities mandated to undertake purchasing. An account of all the specific purchases by the entities against the context of the threshold value should be applied in calculation. This however does not apply when an entity is mandated for its own purchases, conducts the procurement process on its own, has a separate budget for the purchase and funds the purchases through its own budget. In case of framework agreements Dynamic Purchasing System (DPS), where there are multiple suppliers for a purchase over a specified period, the contractor must specify the maximum value of all the contracts in the contract period. When calculating the total value of innovation partnerships, the highest probable value in all phases starting from research activities, value of goods, services or construction work that is expected should be included in the calculation of threshold value. Construction contracts should consider not only the value of the construction work but also the cost of any materials provided to facilitate the supplier carry out the construction work (Ministry of Trade Industry and Fishing, 2018).

Where the contractor splits up the contract into subcontracts, the total value of all the subcontracts are considered. If the total value is equal or exceeds one of the thresholds in the regulation (Ministry of Trade Industry and Fishing, 2018), the rules applicable to the specific threshold will apply to the individual sub-contracts. If the total value of sub-contracts surpasses one of the EU thresholds, the applicable rules of the EU threshold apply, and the procurement should be published in the whole EU zone. When goods and services are contracted regularly, or contract is renewed within one specific time, the calculations for value threshold can be done in two ways. The contractor can for one take into consideration the value of similar goods procured in the last twelve months or the last budget year. Adjustments can be made for the expected changes in the coming period. Alternative is to base the calculations on the total value of contracts to be awarded within twelve months of the first delivery or during the budget year if the period extends to more than twelve months. For a contract to qualify as regular, there should be a certain time connection between signing of a contract (Ministry of Trade Industry and Fishing, 2018).

A contract for leasing or hire-purchase is guided and limited by the contracting period. If a leasing or hire purchase contract is twelve months or less, the contract's value is calculated based on the total value which includes benefits and options accrued. For a fixed-term contract of more than six months, the total value calculation should include the estimated residual value. When the contracts runs for an indefinite unknown period, the total value is calculated based on the monthly value multiplied by forty-eight (Ministry of Trade Industry and Fishing, 2018). In insurance contracts, the principal sum insured should not be included in the calculation. Premiums and other remunerations are considered. When contracting for banking and financial services, the fees, commissions, interest and other form of payments are considered in value calculations. In planning contracts, the fees, commissions and all forms of payments to be paid should be considered. When a contracts total cost cannot be estimated, and the contracts period is four years or less, the basis will be the total value of the contracts period. A contract running for an indefinite period or for over four years, the calculation is done based on the monthly value multiplied by forty-eight. For value calculations for a contract consisting of assorted purchases, or where it is hard to separate the products, it is usual to base the calculations on the main product with the highest value.

2.1.2.4 Procurement process

Public procurement as a process is bureaucratic, entangled in complicities of assessments and evaluation criteria which renders the process complicated even when acquiring simple purchases. There is low competence among public procurement staff (Strømme, 2016). To help public procurement personnel, and to simplify public procurement process, the Agency for Public Management and eGovernment (Difi) has made a standardized conceptual guide, Figure 3 for implementation in public procurement intended to help overcome the challenges, and oversee a contract until it is completed and evaluated (Difi, 2018a). The model initially covers public procurements with a value over NOK 100,000 excluding VAT, which are regulated by the public procurement act, but the guide may also be used for lower amounts. The aim is:

- To guide to procurement staff when implementing procurement
- To ensure that decisions are documented
- Is primarily intended for public contracting authorities
- To guide other providers and suppliers

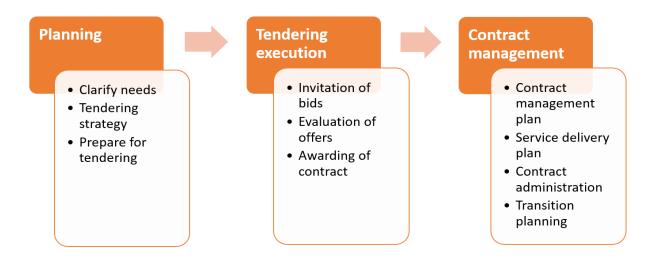


Figure 3: A guide to procurement process (Difi, 2016).

2.1.2.5 Doffin

Database for Public Procurement (DOFFIN) is the Norwegian web-based database for notices of public procurement and procurement in the utility sector that are subject to the European Union regulations (www.doffin.no). All public procurements which are over the EU's threshold value must be published on Doffin.

2.1.2.6 KOFA

The Norwegian Complaints Board for Public Procurement (KOFA) is an independent body assigned to review complaints regarding infringements of the law on public procurement and associated regulations (www.kofa.no/English).

2.1.2.7 Difi

Agency for Public and eGovernment (Difi) has its aim to strengthen the government's efforts to renew the public sector, make it more efficient and accessible (www.difi.no). Difi helps management in public sectors and businesses with advice, investigations, evaluations among others. Difi is the governments organ for developing and managing procurement policy in the public sector.

2.1.3 Contract management

Contract management, also known as contract administration is the process of checks and controlling adherence to a contract. Contract management can be straight forward or complex depending on the size of the project (Garrett, 2007). According to van Weele (2014), contract management is about deciding the right type of contract for the product, service or project to be delivered, and about managing the contract after negotiations closure. Contract management (Industry Capability Network, 2017) starts after contract signature and goes through to the evaluation, review and expiry of the contract. It is a day-to-day management task to ensure that parties deliver according to the obligations and the objectives of the contract.

When a contracting authority enters into a contract (SIGMA, 2011) with an economic operator, the contract must be managed by both to meet the contractual obligations. If a contractor realizes that the contracting authority is not monitoring contract delivery, the contractor may change the contract delivery to less than acceptable, or create variations which are not provided for in the contract (SIGMA, 2011). In procurement, less attention is dedicated to the contract management phase until something goes wrong.

Administering a contract entails adherence to the contract terms, effective communication between contracting parties, managing contract changes, invoicing and timely payment and conflict resolution involving claims and disputes. Good management of these activities is key for the principal to obtain the desired value from the supplier (Garrett, 2007). Contract

management describes the functions performed after the parties have signed a contract (Sherman, 1996). It encompasses activities that take place after contract award which range from routine to unusual (Davison and Sebastian, 2011). The activities are meant to ensure enforcement of contract terms and conditions, and achievement of the stated output and outcomes in the contract, putting focus on contract goals and objectives. Goals in a contract can be timely delivery of goods and services or timely completion of a project (Davison and Sebastian, 2011).

Conflict is prevalent in commercial contractual relationships. Issues such as a supplier claiming higher payments than the contract had stipulated, failure to perform in accordance with contract terms or delivering a project later than the agreed schedule are prevalent in project management. Rigorous procurement procedures and strict contract terms can contribute to adversarial relationships between contract partners. The success of a contract depends on the performance of contract terms and the relationship between the buyer and the supplier. Contract management ensures that all parties to a contract fully meet their obligations.

A major issue prevalent in contract management is transforming a conflict system into a cooperative one. There is need to overcome conflicting interests. Agency problem (van Weele, 2014, 96) is the conflict of interest between buyer and seller due to conflicting goals and information asymmetry. The buyer is motivated by the interest to pay as little as possible for work delivered, and the supplier is motivated to gain as much economically from the transaction. Macneil (1986) says, "A participant in an exchange is a "maximizer" of individual utility when no other goal conflicts with his desire to secure the most goods in return for giving the least in the exchange in question. A maximizer would if he could take what he seeks for nothing. A maximizing participant may nevertheless have non-conflicting goals, such as desire to increase his own power through driving the toughest possible bargain".

Besides ensuring that a supplier fulfills his part of the bargain, good contract management:

- deals with irregularities that may arise during the performance period
- safeguards against disruptions
- safeguards the rights and obligations of the parties
- ensures efficient use of resources, to both parties and the community

Difi (Difi, 2018b) recommends public contracting authorities to ensure that what has been agreed is operationalized by incorporating the contract terms into the business routines and procedures. Responsibilities and roles in contract management can be divided as follows (Difi, 2018b):

- The contract owner is responsible for formulating the contract strategy and making it known in the organization
- Contract controller who is responsible for contract follow-up with supplier, and can make corrections to the agreement
- Roles should also be allocated to buyers who use the contract to procure depending on the buyer's position and responsibility area

Before commencement of performance of the contract, the buyer should be satisfied with the terms and what is to be delivered. It is important to be familiar with the type of goods and services to be delivered, requirements and specifications, any additional services, options, delivery times and prices. Intensity of contract monitoring varies with the type of goods and services procured and the cost of procurement. Simple purchases with contractual obligations are easy to monitor. However major investment projects, and procurement involving framework agreements whose delivery is spread over a long contract performance period require close monitoring, updating of progress reports and escalation routines (Difi, 2011). Controllers should not take it for granted that what is delivered is what was contracted. Control routines should be put in place to confirm that what is received is what is paid for.

In smaller organizations, it is common that the buyer is the same person who is responsible for contract monitoring and control. In such a situation will the organization have a good chance to assess if procurement is in line with the contract (Difi, 2011). It is common in large organizations that the buyer is not the receiver or the user, and delivery and performance are not at the same place. This should not create an exemption control routines. Direct communication, interviews and surveys with direct or end users, and site visits can help access if the quality and service meet the contract terms. Invoices should be controlled if the agreed prices, for example hourly rate, unit price, correspond with the agreement. In case of framework agreements controls should be in place to have an overview of total invoices and payments to avoid surpassing the scope and value of the contract. A digital

contract register system or archive can be useful to give an overview and important information when monitoring contracts. Such a system should contain current information including contract changes, delivered services and goods, prices, contract period and person responsible for the contract. The system can have options to notify of when a contract's end is near, and possibility of escalation (Difi, 2011). Procedures should be in place to ensure good contract's practice in an organization and especially for cooperation between the contract manager, purchasing people and the finance people. In addition to routine contract monitoring, contract managers have a responsibility to oversee that:

- There is no breach on pay and working conditions, and adherence to the Act on Public Procurement of June 2016, No.16, which regulates the pay and working conditions in public contracts for the purchase of services, construction work worth over NOK 1 million for public bodies and NOK 1,75 million for other sectors
- Goods and services procured are produced ethically
- Requirements against social dumping and environmental controls imposed at the tendering stage are fulfilled

2.1.3.1 Types of contracts

The type of governance in a transaction is dependent on the time, costs, frequency and uniqueness of the transaction. Contracts can be classified into four (Brynhildsvoll, 2018):

- Classical contract: This is preferred in purchase of simple or standard goods, and
 when the relationship between the buyer and seller is simple. Classical contract is
 based on the principle of complete presentation (Williamson, 1985) i.e. being able to
 give a precise description of the good or services to be transacted.
- Neo-classical contract: This kind of contract is suited for complex transactions where regular changes to the contract are expected.
- Relational contract: Suitable when the transaction is not a one-time affair and longlasting relationships are built. This contract is suitable for development of innovative and cost-effective solutions. Mutual loyalty and trust are the basis of such contract.
- Alliance contracts: These are common in the gas and oil sector. The buyer and seller
 work tightly together from the designing and specifications of a project. High degree
 of relationships, loyalty, trust, and collective responsibility of objectives guide the
 transaction. Alliance contracts can be compared with innovation partnerships
 discussed in chapter five.

Contracts can be classified also as standard or custom contract. Emphasis is needed to differentiate framework agreements versus contract. A framework agreement is an "an agreement between one or more contracting authorities and one or more economic operators which establishes the terms under which the economic operator will enter into one or more contracts with a contracting authority in the period during which the framework agreement applies (Office of Government Commerce UK, 2008)". A framework agreement is thus an agreement with suppliers which stipulates the terms and conditions under call-offs (bulk purchases over a period) can be made. A framework agreement places no obligation on the buyer to buy, and the contractor has a choice to procure somewhere else if the framework does not give value for money. Contracts put an obligation on the buyer to procure from supplier(s) in a specified period (Office of Government Commerce UK, 2008).

2.1.4 Importance of contract management

Effective contract management can help overcome problems common when contracting such as price manipulation, incomplete deliveries, fraud and corruption. Such problems are likely to occur in cases such as (Brown and Potoski, 2003a):

- When there is limited or no competition among potential suppliers
- When contracted goods and services are very technical and difficult to specify in written contracts
- When suppliers have more information than available to public procurement staff
- When contract management is lacking on the part of public procurers

It is in the contract management phase that the delivery and consumption of the goods and services happens. It is this phase that most of the funds are spent, most time is spent and against which performance is judged which forms basis for future business (Industry Capability Network, 2017). Yet this is the part which management focus is minimal. Industry Capability Network (2017) illustrates a two-year procurement project measured on the aspects of time and expenditure against the activities performed in a procurement lifecycle.

Table 1: Profile of time against procurement lifecycle phases (Industry Capability Network, 2017).

2-3 months	1 month	1-2 months	1 month	24 months
planning	Bids invitation	Bids evaluation	Contract award	Contract management

Table 2: Profile of procurement expenditure against procurement lifecycle phases (Industry Capability Network, 2017)

2-3%	1%	1-2%	1%	95%
planning	Bids invitation	Bids evaluation	Contract award	Contract management

Research shows that a contractor's ability to manage the relationship with a supplier is impacts on the efficiency at the strategic level (Pettersen, 2012). Poor contract management systems can limit suppliers' performance leading to poor quality in deliveries. To coordinate relationships between organizations, personal qualities, professional norms, values and traditions developed over a long time create a common reference that is effective in managing complexities that may arise in the relationship.

2.1.5 Contract management process

There are three phases in the contract management process (Brown and Potoski, 2003a):

- Feasibility assessment- in this step, public procurement professionals determine
 whether to make in-house or procure goods and services. Activities in this phase
 include hiring professionals to assess whether a function was appropriate for
 contracting and strategic planning to carry out procurement.
- Implementation- the contracting process is implemented through bidding, vendors selection, negotiations and structuring the contract terms. Activities include hiring legal staff to negotiate tenders, create contract system and benchmarking.
- Evaluation- the contract is monitored to evaluate supplier's performance as to whether the responsibilities in the contract are being fulfilled. Activities in this phase include collecting performance information and project audits.

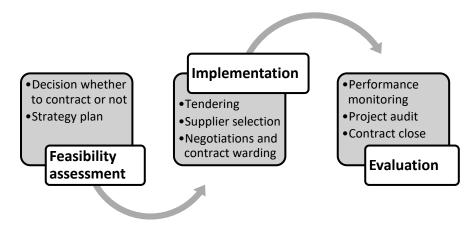


Figure 4: Contract management process (Brown and Potoski (2003a))

2.1.6 Risk management

By being part of a supply chain web public procurement faces many risks and vulnerabilities. Risk means harm that can occur to an organization, internally or externally disrupting its business performance. Procurement risk occurs when dealings with suppliers result to an outcome which harms an organizations reputation, capability, operational integrity and financial viability (Russill, 2010). Risk management involves judgement, criteria, and calculation to decide the potential of a harm and mitigating the ability of a harmful occurrence, and preventing it from occurring in order to meet delivery commitments (Russill, 2010).

The procurement process starting with needs specification, request for offers, negotiations, contract awarding, and contract follow-up is prone of risks. The procurement decision is measured on the relative costs of in-house production i.e. the costs of factors of production, which are fixed assets, labour and capital, and the comparative costs of contracting i.e. costs of planning, adapting, and monitoring the task completion, referred as transaction costs (Brown and Potoski, 2003b, citing Coase 1937; Williamson 1981, 1996). By specifying in details what a supplier is required to do and the outcomes to be achieved, the risks in a contract are reduced and the costs herewith in negotiations, implementing and contract follow up are reduced (Brown and Potoski, 2003b).

A risk is anything that can go wrong. Risk management involves identifying the potential issues that can go wrong. It encompasses risk analysis, risk assessment and risk mitigation, and taking decisions and actions to control the risk (The Chartered Institute of Purchasing and Supply, 2007). Risk mitigation, reducing the chances that anything will go wrong, should occur before awarding a contract. In contract management, management of risks

identifies and controls all risks that may impact on fulfilment of a contract (Office of Government Commerce UK, 2014). Risk is not necessarily negative. A decision to involve a supplier and integrate an organization's supply chain with the supply is a risk. An organization can gain through cost savings, timely deliveries and overview of the upstream supply chain. The risk to integrate converts to an advantage. Risks should be assessed, mitigated and probability of negative outcomes minimized. Responsibility for who bears risk should be allocated. Important point to note in public procurement is that government as the provider of public goods cannot transfer risk to a supplier. The ultimate responsibility remains with the contractor, and suppliers need payment for taking risks which is reflected in the contract (Office of Government Commerce UK, 2014). Examples of issues which can potentially go wrong in procurement include:

- Supplier not able to deliver the right quantity and quality
- Poor supplier evaluation
- Poor specifications
- Supply chain disruption due to forces of nature
- Contractor not meeting obligations
- Leaked information which complicates the negotiation process
- Change of legislation
- Change in demand, too low or too high than planned

When purchasing from the open market, it is normal that it is the seller's contract, terms and conditions, which apply without giving room for negotiations. Such a contract will normally exempt the seller from any liability and responsibility, and the balance will always tend to tilt in favour of the seller's side. It is important therefore when negotiating a contract that risks are shared, that the terms and condition do not favour only one side and the contract reflects the buyer's needs (Brynhildsvoll, 2018). The four types of contracts described earlier, i.e. classical, neo-classical, relational and alliance require different risk management approaches. Brynhildsvoll (2018) proposes contract governance based on transaction risk and degree of integration (relationship) as shown in Figure 5.

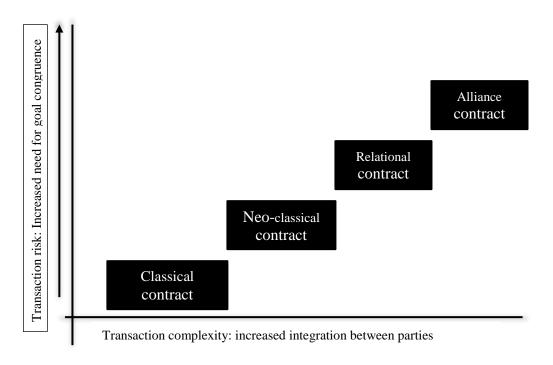


Figure 5: Choice of contract governance depending on risk and transaction complexity (Brynhildsvoll, 2018).

2.2 Theory review

The chapter discusses theoretical perspectives in contract management. Transaction costs economics and relational contracting theory are presented.

2.2.1 Transaction costs economics

Transactions costs are costs attributed in reaching and enforcing agreements (Williamson, 1979). Transaction costs in contracting include costs for formulating, negotiating, executing, monitoring and evaluating contracts (Peterson et al., 2015). Transaction costs arise from specific investments made by an organization, frequency of transactions and uncertainties. These specific investments include tools, equipment, operating procedures and systems (Heide and John, 1990). Müller and Turner (2005) regard transaction costs as the economic equivalent to friction in physical systems that arise from the complexity of the buyer seller relationship and the lack of a contract structure to manage the relationship in a comprehensive manner. Williamson (1979) suggests that transaction costs depend on three critical dimensions of transactions which are asset specificity, uncertainty and frequency. The three critical dimensions of transactions determine the governance structure for a transaction.

Williamson (1979) argues that humans are limited in their foresight and cognition and are willing and able to renege on promises, a behavior Williamson (1979) captured with the concepts of bounded rationality and opportunism. Transaction costs economics (TCE) is preoccupied with preventing negative outcomes resulting from the human behavior of opportunism and bounded rationality (Vyas, 2016). Rasheli (2016) in their research state that transaction costs are associated with institutional problems, lack of financial resources and attitudes towards accountability, transparency and competition.

According to TCE, parties to an exchange have opportunistic behavior and need to safeguard their specific investments from the possibility of relationship termination or "opportunistic expropriation" (Heide and John, 1990, citing Klein et al. 1978). When specific investments are involved, there is bilateral governance and shared operational control over assets that serve to curb opportunistic behavior. Firms making specific investments will want to get involved in activities which are traditionally considered an exclusive of the other party in order to minimize risks (Heide and John, 1990). Joint operations involve high set up costs. Relationship importance increases continuity expectations. Strenuous efforts are made to verify suppliers' capabilities in important relationships (Heide and John, 1990). Firms are reluctant to switch suppliers due to high switching costs where supplier relationships impose high specific investments, for example specific investments in automated processing in manufacturing (IMP, 1982).

Goods and services subject to exchange within the public sector are public goods and specific in nature (Poniatowicz, 2017). Transaction costs are higher in exchange of goods and services of special nature. Frequency of exchange of public goods is lower. This translates to higher transaction costs of attracting business partners and negotiations (Poniatowicz, 2017). Public procurement is subject to public policy. Public procurement is used as a policy tool to achieve multiple goals such as environmental sustainability, job creation, and promoting innovativeness. Public policy is driven by politicians, and is subject to political choices of politicians, various interest groups and lobbyists. Politicization of public policy and bureaucracy create uncertainty regarding contracting partners and the contracting environment. This uncertainty leads to higher transaction costs (Poniatowicz, 2017).

To mitigate against non-compliance or "moral-hazards", contracts contain many provisions. Suppliers undergo thorough vetting before signing a contract, and by signing give authority to contractor to be monitored with penalties for violations (Peterson et al., 2015). To raise chances of contract compliance, the principal adds a premium to payments to cover the extra transaction costs. If the agent has information not disclosed to the principal, information asymmetry, the principal pays information rents by paying the agent over and above a uniform contract (Peterson et al., 2015). Since suppliers are driven by profit motive, there is a risk that they will behave opportunistically and exploit the contract for private gain. Governments anticipate this behavior and increase their capacity in contract management as a precaution against poor supplier performance (Brown and Potoski, 2003a).

2.2.2 Relational contract theory

Organizations can hardly be self-reliant in terms of all the resources need to create and deliver value. To obtain resources that cannot be generated internally, exchange has to take place with external actors (Douma and Schreuder, 2017). Most exchange takes place through markets, where the right to use goods and services is transferred. Exchanges are also called transactions (Douma and Schreuder, 2017). Exchange is referred by (Macneil, 1986) as the giving up of something in return for receiving something else. Exchange enhances the individual utilities of the exchanging parties respecting the goods being exchanged (Macneil, 1986). Individual utility is described as the individual benefit from having particular goods for one's use (Macneil, 1986).

Relational contracting theory has its documented roots in the works of (Macaulay, 1963, Macneil, 1980). Macaulay (1963) refers to contracts as "devices for conducting exchanges" and which involve two distinct elements:

- Rational planning of the transaction with careful provision for as many future contingencies as can be predicted
- Use of legal sanctions to induce performance or to compensate for non-performance. Contracts specify conditions and the basis under which transactions take place. Douma and Schreuder (2017) assert that transactions take place in the context of environment. Environment has many dimensions which may be economic, social, political or institutional. The environment provides the conditions for particular organizations to be created, shapes all organizations by exerting economic, social, political and other pressures and is the

ultimate selection mechanism for determining which organizations survive and are successful (Douma and Schreuder, 2017).

The institutional environment dimension is of interest. North (1990, quoted in Douma and Schreuder (2017)) defines institutions as, "the rules of the game in a society, or the humanly devised constraints that shape human interaction". Rules include both formal and informal rules and the way they are enforced in a society. Formal rules include written laws and regulations, and informal rules are norms of behavior, conventions and internally imposed rules of conduct (Douma and Schreuder, 2017). North (2005, quoted in (Douma and Schreuder, 2017)) explores further that, "Throughout history, exchange has been based on personal knowledge of the other party. Reputations and repeat dealings have been the basis for confidence that the exchange would be lived up to in terms of both the quantity and the quality of the good or service exchanged, and that the agreement would be executed in accordance with the understanding of both parties. Transaction costs in such cases were small".

Contract management aims to obtain the services as agreed in the contract and achieve value for money. Contract management increases the efficiency, effectiveness and economy of the service described by the contract, controlling costs against risks and actively managing the customer – supplier relationship. Contract management aims for continuous improvement in performance period of the contract (Office of Government Commerce UK, 2014).

Conflict is prevalent in contracts. A conflict in a contractual relationship can be dealt with through negotiations and a cooperative system in which the parties act rationally in the name of a common objective. Macneil (1968) sees contracts as cooperative and as instruments for social cooperation. Macneil (1968) continues to say that contracts concern cooperative social behavior characterized by a willingness and ability to work with others, people affirmatively working together. Individuals are enhancers of individual utility immersed in relations creating countless contramotives. Exchange is relational exchange, i.e. exchange carried on within relations having significant impact on its goals, conduct and effect (Macneil, 1986).

Relational exchange creates a situation where the long-run economic interest conflicts with the short-run desire to maximize individual utility in an exchange. As the exchange becomes more relational, the idea of short-run maximization becomes artificial (Macneil, 1986). In the long-run this exchange creates norms to which all participants are expected to conform to. Norms shape the exchange decisions. Contract between two utility maximizing individuals cannot be regarded as a contract, but war (Macneil, 1980). The norms emerging in relational exchange become part of the society and are embedded in obligations and contracts. Relational exchange is interdependent exchange in the sense that each participant is dependent on the other for future exchange to happen (Macneil, 1986). Each participant is an important contributor for the exchange to continue. Macneil (1980) says that a contract is, "no more and no less than the relations among parties to the process of projecting exchange into the future". A contract as such is a relationship guided by norms of the participants.

Contracts are flexible, and in transactions serve the purpose of creating an exchange relationship or solving problems arising in the course of a contractual relationship (Macaulay, 1963). Non-contractual relations are common in inter-organizational relations. In transactions contracts are not always a necessity. Norms can replace contract and contract law. According to (Macaulay, 1963), honoring commitments and not cheating on a deal, producing and affirming quality of products are norms which confirm commitment and induce performance. Personal relationships across organizations exert pressures for conformity to expectations (Macaulay, 1963) and organizations involved in exchange desire for future exchanges and avoid situations which may impede on future exchanges. Business people are concerned with the reaction of the other party in an exchange and their own reputation (Macaulay, 1963). Legal sanctions are avoided with exchange parties preferring self-imposed sanctions.

There are costs tied with not conforming to performance expectations of the members in an exchange relationship. Poor reputation lead to costs of changing to a new supplier, loss of reciprocity in buying and selling, loss of future business and network (Macaulay, 1963). Parties who are stringent to enforce contracts and contract law may face undesirable consequences. Detailed negotiated contracts can affect creating good exchange relations between organizations. Detailed contracts lead to delay and parties may not agree at all resulting to loss of business. Detailed planned contracts which expect a party to perform to the letter of the contract affect flexibility and indicate loss of trust. This is bad for "customer relations" (Macaulay, 1963). A party may be willing to fight with all means possible if

threatened with litigation. Such an action often results in a "divorce" ending the "marriage" between the two businesses.

Specialization of labor and exchange, a sense of choice, and a consciousness of the future are the primal roots of a contract and the common denominator in a contract. A contract is, "the relations between and among exchange parties to the process of projecting exchange into the future (Macneil, 1980)". Contracts can be categorized into two, discrete and relational. In discrete contracts relations do not exist and parties are interested in the simple exchange of goods (Macneil, 1980). Discrete contracts requires that the parties have had no relations before the exchange occurring, and they will have none after the exchange takes place (Kornhauser, 1982); the planning of the exchange is complete and there are no gaps in the contract. Relational contracts emphasize behavioral norms which commit to preserve a relationship (Josetta et al., 2014), where commitment is strong and adjustments can be made to enhance the level of cooperation required to maintain in long-term relationships.

2.2.3 Relationships in contracts

A relational contract does not mean the contract is "soft" or "fluffy" (Vitasek and Frydlinger, 2017) or an informal handshake. It is a formal contract characterized by "a highly collaborative relationship where the parties consciously choose to make social norms contractually binding (Vitasek and Frydlinger, 2017)". Relationships in relational contracts are person to person and organization to organization with the purpose of creating a flexible contracting framework to promote a fair and balanced exchange, and a common understanding that business is dynamic, prioritizing a relationship with continuous alignment of interests before the commercial transactions (Vitasek and Frydlinger, 2017).

The efficiency and effectiveness of an organization are strongly impacted by the operations of its suppliers. This efficiency and effectiveness are determined by coordination across firm borders. No organization can survive without suppliers. Purchases represent between 50%-80% of the total costs in some companies (Gadde et al., 2010). Organizations rely strongly on outsourcing and thus relying more on suppliers. Relationships with suppliers represent the fundamental platform for any supply network strategy. Suppliers play a key role in rationalization and development of purchasing. The key role of suppliers in purchasing require long-term collaboration between business partners, a characteristic of buyer-seller relationships (Gadde et al., 2010). Supply chain management encompasses integration,

coordination and collaboration of a network in the flow of resources, goods and services. Organizations develop different kind of relationships with their suppliers. Some involve close interpersonal contacts; others are at arm's length. Joint product developments are conducted together with suppliers, others serve as subcontractors relying on customer specifications. In some, products are delivered in JIT in close cooperation, in other relationships buffers and inventories are at hand (Gadde et al., 2010).

The importance of relationships in transactions is manifest in (Engelseth, 2016) in their study of seafood export from Norway to Japan. In their study (Engelseth, 2016) state that when exporting to Japan, which is in a context of high trust and well developed relationships, detailed contracts are drawn but not signed, and while exporting to Ukraine which is in a context of low trust, detailed contracts and prepayments are demanded. In their study on how companies safeguard their transactions in international business relationships, (Engelseth and Glavee-Geo, 2016) found that companies supplement formal contracting with relational contracting which among others is characterized by norms of solidarity, cooperation, mutuality and trust. Engelseth and Glavee-Geo (2016) elaborate that in international business relationships, suppliers should be aware that good relationships with overseas customers will lead to increased business hence the need to carefully initiate, nurture and develop relationship. The human element of relationship building through cooperation, trust building, commitment and social relationships is important in relationships.

Partnering is a concept which establishes mutual objectives, trust, cooperation and teamwork which enables participants of an industry to focus upon project objectives. It has evolved because of the failure of traditional procurement methods to meet clients' expectations and project objectives (Naoum, 2003). In Norway there is increased industry interest towards project partnering in construction. Project partnering is used to avoid, costly conflicts characterizing construction projects, the high cost of deliverables, inadequacy of management skills and conflict of goals among the involved actors (Wenche et al., 2012). In their research (Wøien et al., 2016) mention increased partnering in the Norwegian public sector. Municipalities and public bodies such as *Statsbygg* are implementing partnering. Partnering according to (Wøien et al., 2016) is motivated by the traditional adversarial culture, uncertainty in projects and high levels of conflict in the construction industry. Through partnerships, organizations aim for increased productivity, avoidance of conflicts

and shorten execution cycles by focusing more on relations than transactions (Wøien et al., 2016).

Partnering is successful if certain factors are present: strategy, membership, equity, integration, benchmark, project success and feedback. Integration improves partners' cooperation and builds mutual trust (Wong and Cheung, 2005, citing from Bennett and Jayes 1998, Hitchings and Green 2001). Partnering in construction is used by two or more organizations to achieve business objectives by maximizing on the effectiveness of each partner's resources (Wong and Cheung, 2005, citing from Bennett and Jayes 1995). Partnering is anchored by establishing mutually agreed objectives, an agreed method of conflict resolution and active continuous measurable improvements (Wong and Cheung, 2005). This leads to smooth project operations. In their survey to examine the relationships between trust and partnering in public sector projects in Hong Kong, Wong and Cheung (2005) found that trust is a key factor for partnering success. Performance, permeability, and relational bonding are significant and contribute towards trust level (Wong and Cheung, 2005). Haugseth et al. (2014) identify certain contractual elements which should be included when partnering to create a win situation for all parties. These elements include among others; early involvement of design-builder, value-based procurement, an intentional agreement, partnering charter, continuous workshops and a predetermined method of dispute resolution.

2.3 Frame of reference

A summary of the literature review reveals that a successful procurement process starts with formulation of policy and strategy for purchasing. A business case is drawn to brainstorm the need for the procurement and how the procurement is to be managed. With the main purpose of providing public goods and value for public funds, public procurement is guided in addition to strategy by legislation and regulations which govern the conduct of the process and interactions between buyers and suppliers. Regulating bodies and the public keep watch over the process and conduct of public staff in procurement. A focused contract management process meets the expectations of the public by being transparent, conforms to legislation and regulations, to build collaborative relationships between buyers and sellers to obtain value and satisfactory delivery of goods and services as defined in the contract's terms and conditions, and at the same time minimize business and reputational

risks. The Figure 6 below summarizes the focus areas for good procurement management from the literature review. This is the frame of reference for this study.

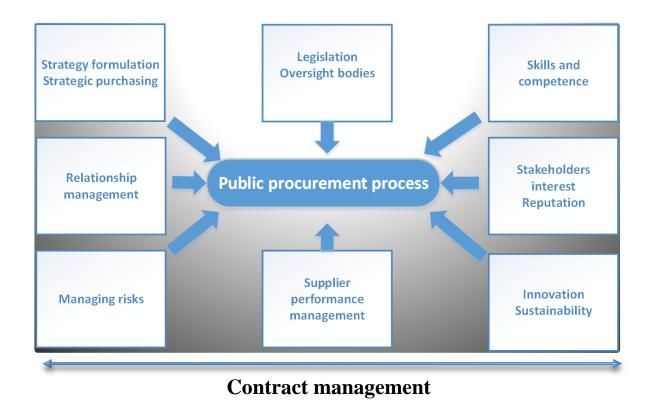


Figure 6: A conceptual model of the frame of reference.

The model puts together the elements of a successful procurement and contracting process which are summarized from the literature review. How these elements interact and are managed in performance of the procurement process influences greatly the outcome of the public procurement process. Contract management is an overlapping phenomenon that transcends all the elements and beyond the internal confines of public procurement in an organization.

3.0 CHAPTER THREE: RESEARCH METHODOLOGY

This chapter informs the process of undertaking the study research, and the scientific reasoning for the activities during the research. In this chapter the research method, research process and approach, data collection, data validity and reliability are discussed. Interview results are discussed in chapter four on findings.

3.1 Research method

This study applies a qualitative multiple case study research approach. Case in research is used to mean a setting, place or institution or may be used to mean both the setting, place, institution and people in it (Bartlett and Vavrus, 2017). Yin (2014) suggests that case studies can cover multiple cases and then draw a single set of "cross-case" conclusions. Yin (2014) defines case study as, "an empirical inquiry that investigates a contemporary phenomenon in-depth and with-in its real-world context. Case study research is used when one wants to understand a real-world case and when such understanding is likely to involve important contextual conditions pertinent to the case". A qualitative case study is "an intensive, holistic description and analysis of a bounded phenomenon such as an institution, a person, a process or social unit (Bartlett and Vavrus, 2017, citing from Merriam, 1998).

The five features of qualitative research (Yin, 2010) made the use of this research method more suitable. These features are that qualitative research involves studying the meaning of people's lives under real-world conditions and capturing their perspectives, represents the views and perspectives of people under study, covers the contextual conditions under which people's lives take place, explains through existing or emerging concepts the behavior of people and uses a variety of sources of evidence which adds to the study's credibility.

A case study was preferred because the topic at hand, contract management requires in-depth investigations of activities and strategies employed and compare the theoretical perspectives with the empirical findings. A case study answers the "how" and "why" when a phenomenon is studied in its natural occurrence. Multiple case studies designs are stronger, have more sources of evidence and yield more valuable insights than single-case studies (Yin, 2014). Multiple case studies benefit from good study of a phenomenon, where powerful independent analytic conclusions are derived which are considered more compelling, robust and strengthen the findings.

The unit of analysis is a public sector organization. Focus was to investigate the phenomenon of contract management by finding out the activities and strategies used when performing the phenomenon. In-depth open-ended, face-to-face interviews are used. This is to strengthen evidence and provide rich findings to the study. Key informants were interviewed to provide rich input through their knowledge, experience and interaction with the phenomena studied. Because of the limited number of case studies, this study does not seek generalization but focus to present the findings as in Organization A and B.

3.2 Research process and approach

The research process originated from a study proposal at school that indicated that the procurement function in the public sector struggles with performing post-ward contract management activities after contracts are awarded. An interest was born to investigate how the public sector procurement function delivers on a contract after it is signed and hence the formulation of the thesis statement "Contract management strategies in public procurement". A literature review was done, and the first research question was formulated, "what activities and strategies do public organizations perform in undertaking contract management" which required an empirical study. In-depth knowledge of the phenomena was required, and this was possible by studying the phenomena in its natural setting. A case study accompanied by interviewing subjects who are participants in the phenomena was considered the best strategy to gain in-depth knowledge. After data was collected through interviews, a data analysis was performed. The data analysis results were explored to find answers for the first research question. The literature review of the phenomena public procurement and contract management culminated to the second research question. A frame of reference was developed from the literature review and based on findings from the first question, the results were explored to answer the second question to find the interplay between the empirical findings and theoretical perspectives.

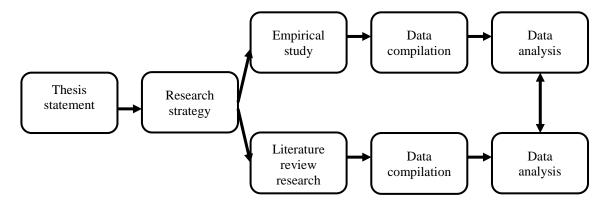


Figure 7: Research process (Adapted from Klevensparr (2016)).

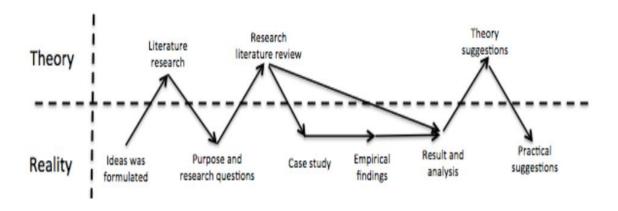


Figure 8: Research approach (Adapted from Klevensparr (2016)).

3.3 Data collection

A case study involves interaction of participants, the researcher and the research audience. The researcher collaborates with participant to collect data, selects ideas to include in the report, connecting the ideas and embedding the ideas in a narrative (Marrelli, 2007). Two sources of data were used, interviews and literature such as journals, government reports, statistic reports, internal documents, books, online data and websites. The literature materials are referred to as secondary data in this chapter.

3.3.1 Interviews

Interviews were used as the primary data source. Primary data is described as original data collected in a research. I as the interviewer conducted the interviews personally. The

interviews were conducted in Norwegian language. The informants were made aware that English was the language used in the master studies to which the thesis was part of. The informants expressed their reservations that if they gave their narrations in English, a language they were not very fluent in, their narrations might not come out well as they desired. They chose to answer in Norwegian because being their mother tongue, the informants were most comfortable and fluent in narrating their experiences in that language, in addition to that the interviewer was like the informants, fluent in and understood the Norwegian language. The informants were natural in a Norwegian language set up. Use of Norwegian language did not create any obstacles to the interviewer. The interviewer and the informants were conversant with the professional language of the research topic.

Organization A and B qualified for the research because they are public institutions. A public institutions is in my description any organization funded by taxpayer's money and whose mandate is to provide welfare goods to the citizens. Organization A is a publicly funded hospital trust and Organization is a publicly funded municipal government organization. The research problem unit of analysis is a public organization which qualifies A and B. In organization A, a staff who is the head of purchasing was interviewed, whereas in organization B two staff, the head of purchasing and a purchasing controller were interviewed. The informants were purposely selected based on their experience, knowledge and understanding of the phenomenon of contract management. In each of the two organizations, there are several procurement staff. Each procurement staff has responsibilities and not all have oversight of the whole process. The procurement managers have over thirty years of experience in the same position between them and have full oversight since the buck stops at their desk, whereas the controller is engaged in controlling that all the purchases are undertaken as per the terms and conditions of the existing active contracts. Thus, the controller has overview over the day-to-day purchasing.

Advantage with collecting one's data is that "the operationalization of the theoretical constructs, the research design, and data collection strategy can be tailored to the research question which ensures the study is coherent and that the information collected helps to resolve the problem. However collecting one's data is costly and time-consuming (Hox and Boeije, 2005)".

Before undertaking the study, the research topic was presented to the academic faculty for approval. After topic approval, guidance was sought from the research supervisors on the best data collection method and what data to look for. This culminated to a case study through interviewing and therefore an interview guide was necessary. The interview guide used in all the interviews were similar in that they contained the same questions and in similar format. The same method of data collection was applied, open-ended deep interview. Open-ended question allows an informant to give a narrative in own words and ideas. Permission was granted to record. Follow-up questions were used during the interviews to probe for more information. During the period of writing the research, clarification and follow-up questions were asked. Thus, there was more communication and follow-up interviews after the first interview.

An invitation to participate in the interview was sent to the informants. The invitations were similar in content and described the purpose and how data was to be used. The informants were informed of their rights; the right not to participate, the right to confidentiality, and the right to access the data before the research is published and censor any data. The informants consented to participate by signing an agreement which meant they understood their rights. After transcribing the interview, the transcript copies were sent to the informants to proofread and consent if the interview transcripts were truthful and factual as happened in the interview. The respondents confirmed that the findings were credible and accurate as captured in the interviews and further edited the transcripts by removing and adding information. The informants chose their names and that of their organizations be anonymous for data protection and to protect the sources. The interview findings are in the next chapter, chapter four on findings. Table 3 illustrates a breakdown of interview schedule and correspondence with informants.

Table 3: Schedule of interviews and correspondence with informants

Date	Organization	Purpose
06.02.2018 10:00-11:00	A	First interview on contract management
		activities and strategies in Organization A
13.02.2018 14:30-15:50	В	First interview on contract management
		activities and strategies in Organization B
04.09.2018	A	Interview transcripts sent for confirmation, with
		requests for more in-depth information.
07.09.2018	В	Interview transcripts sent for confirmation, with
		request for more in-depth information.
13.09.2018	A	Request for probing interview questions. Never
		materialized
25.09.2018	В	Request for probing interview questions. Some
		answered with promise to answer more later. The
		date did not materialize.
15.10.2018	A & B	Transcripts confirmed with corrections.

3.3.2 Secondary data

The secondary data sources used were certified statistics gathered online from National Statistics Bureau (SSB), information and government documents and reports accessed online, websites, and documents provided by one of the organizations. Literature review was conducted to gain more knowledge on the topic under study.

3.3.3 Data validity and reliability

Bias in interview data can be mitigated by using numerous and highly knowledgeable informants who understand the subject well from different perspectives (Eisenhardt and Græbner, 2007). Two organizations which operate within the same set-up, public bodies, and which operate in the same market, provision of public goods, were the cases of study. Replication in the two cases render the findings of the research robust and convincing. In case studies researchers have little possibility or no possibility to control what is going in the case (Yin, 2014). Similar questions in form of a research guide were presented to all the informants. No alteration was done to suit any of the informants. The interviews were audio-recorded and transcribed soon after. Notes were also taken as the interviews were on-going.

To build trustworthiness and credibility, Yin (2010) says that qualitative research should be carried out in a transparent manner by documenting the procedures, availing the data for inspection so that people can scrutinize the evidence used to support findings. Yin (2010)

further states that such a research should be done methodically, and evidence should come from the respondent's own decision-making processes and actual language. Methodic means a set of procedures and a defined research design is followed. This avoids biases and misrepresentation. Conclusions should be based on the collected and analyzed data, i.e. empirical research. Research must have integrity, and be trusted as representative of the correct position and statements (Yin, 2010).

Data triangulation was used to corroborate the findings of the study. Yin (2010) defines triangulation as the principle with the purpose of "seeking at least three ways of verifying or corroborating a particular event, description, or fact being reported by a study". Triangulation serves the purpose of strengthening the validity of a study.



Figure 9: Data triangulation

4.0 CHAPTER FOUR: FINDINGS

The study used an interview guide developed to solicit information specific to the process of contract management and activities performed in relation to the process (see appendix 1 for the interview guide). The same interview guide was used consistently in all the interviews. At the beginning of every interview the informants were informed of confidentiality provision and the rights in the provision. Integrity of information received was visited and the right to access and withdraw information from the interview. Consent to be interviewed was granted by signing a standard contract for research. Interviews were open-ended and lasted between one - one and half hours. The results presented are true as elicited only from the face-to-face interview interactions, and with the informants' authority as audio recorded live and from the notes taken during the interviews. The interest of the interviewer was and as guided by the interview guide and in the signed standard agreement to participate in the interview. The writer has no conflict of interest in the research.

4.1 Findings in Organization A

The chapter presents the findings of the research in Organization A. The findings are grouped in an introduction which is a brief about the organization followed by the main section where the full findings are presented.

4.1.1 Introduction of Organization A

Organization A is a hospital trust in the west coast region of Norway. It is owned by the Central Norway Health Authority. Organization A oversees operation of 18 institutions under it in 36 municipalities. It has for the year 2018 a budget of NOK 5.8 billion.

Organization A has been found culpable of several procurement malpractices by KOFA. In 2012 KOFA found Organization A responsible for undertaking a re-tendering process and negotiations without publishing a public notice and changing the original specifications of the tender without a notice. Same year the organization was fined for violations of the Public Procurement Act by performing unlawful direct procurement.

The interview took place at Organization A's headquarters and lasted one hour. The informant is the head of purchasing, and the only purchasing staff in the organization.

Purchasing function is under finance department. The informant has worked in the same position for 17 years.

4.1.2 Interview findings in Organization A

The results of the interview with Organization B are presented in the following subchapters.

4.1.2.1 Strategic purchasing

Organization A is part of a purchasing cooperation which is organized at three levels; first level is nationally at Health Purchases (Sykehusinnkjøp), level two is regionally at health authorities and level three is health trusts to which Organization A belongs to, see Figure 10. All the three levels work together under an agreement for cooperation creating a centralized purchasing competence pool at Sykehusinnkjøp. Sykehusinnkjøp is a centralized purchasing body owned by all the public health sector players in Norway to undertake centralized procurement and contract management on their behalf. Sykehusinnkjøp has a centralized management and a decentralized operational structure. It has staff who operate at local offices nationwide and coordinate procurement and purchasing needs with reginal health authorities and local hospital trusts. Although the informant works alone in Organization A, he works in collaboration with the Health Purchases staff at the local and regional level, implements in Organization A purchasing decisions made at the national and regional level. He is involved in all procurements in the organization. The centralized purchasing pool at Sykehusinnkjøp has about 250 purchasing professionals. The procurement plan for Organization A on the annual wheel is to undertake between 150-200 procurements in 2018. Figure 11 illustrates organization of procurement in Organization A.

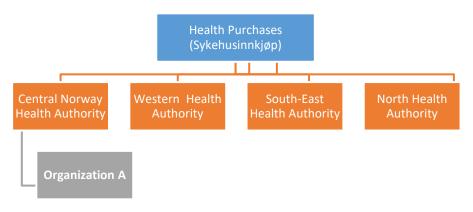


Figure 10: Organization tree in Organization A.

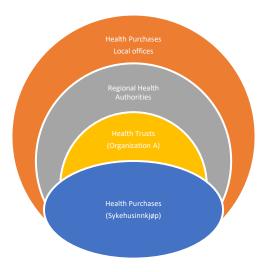


Figure 11: Organization of procurement in Organization A.

Consolidation of the purchasing function in the public health sector came into effect in 2016. Before, the regional health authorities and trusts had their own staff and departments dedicated to purchasing. After consolidation, these staff were seconded to Health Purchases where they work in collaboration with the local purchasing functions like the informant. All levels of purchasing and procurement coordinate with each other, though the coordination process is at transition since the three levels came into operations in 2016. Health Purchasing does not purchase the goods or services. Its main role is to carry out on behalf of the public health authorities and trusts, procurement and tendering process of goods and services, and manage contracts after they have been agreed on. Goods and services procured are products used in all areas of the specialist health service, such as IT equipment, pharmaceuticals, medical equipment, medical and administrative consumables, and services such as temporary employees and flights. The health authorities and trusts through their purchasing professionals specify the purchasing needs. For the year 2018, Health Purchases has a plan to undertake 6081 purchases worth NOK 12,579 billion.

Health Purchases through its operations at the local offices collects and consolidates the purchasing needs of the different health authorities and trusts. By consolidation and performing procurement under one umbrella, they enjoy scale economies, have buyer power to bargain with suppliers and the process of contract management is simplified.

4.1.2.2 Legislation and regulations

Organization A has an agreement with Health Purchases on what they can procure on their own. The Public Procurement Act is the basis of procurement in Organization A. Organization A decides its purchasing needs, criteria for choosing suppliers, the type of contract, whether differentiated or standard but it is Health Purchases which is mandated to undertake the tendering process and entering of contracts. It is normal when making purchasing decisions that Organization A will consult and have input of other purchasing people at Health Purchases and at the regional level, Central Norway Health Authority. Procurement can be categorized in three:

- Framework agreements- goods and services are purchased on continuous as needs
 arise basis. The signing and management of framework agreements is done by Health
 Purchases who also ensure the agreements are renewed as they near expiration.
- Specific purchases and investments at the local level. These are communicated to Health Purchases who undertake competitive tendering on behalf of Organization A. This is done through a standardized process so that Health Purchases can plan for the publishing and the tendering process in the annual wheel. Ad hoc and acute special goods and services are routed to Health Purchases which has the competence and mandate to undertake purchases of specialized services and goods.
- Organization A has mandate to decide and contracts on its own terms 20% of its purchases.

4.1.2.3 Competence and skills

One advantage of centralizing purchasing was to simplify contract management. This is more so needed in managing framework agreements. In the current situation, if there is a deviation from contract terms, the deviation is followed-up systematically and is corrected sooner. The informant mentioned that before the current set up, the purchasing people were pre-occupied with the system and process of procurement and did not regard contract management as important. They were not as good at contract follow-up. There was no established strategy or routines for contract follow-up. The process of contract management was done in a hap-hazard manner. When deviations were noticed, for example price adjustments or quality, it was not followed up systematically. It was easier to ask for an explanation from supplier, and the reason for example could be due to an increase in price index or increase in freight and the reason was accepted without further interrogation. This

was because there was lack of enough competence and it was left to the suppliers who were regarded to have knowledge of the market, the product, the price calculations and specifics in the contract. It was not easy for the procurement function to know whether the contracts emphasis was on price or quality. With the new consolidation, the role of contract management is mainly at Health Purchases, although Organization A has its roles to perform, for example controlling prices and deliveries as they happen at the local level.

4.1.2.4 Relationship management

Health Purchases maintains systems and control routines on every supplier in the annual wheel. They have manpower dedicated to contracts follow-up. They supervise purchasing staff who undertake purchasing under framework agreements. Contracts are followed-up from signing until they are terminated. This is to ensure the conditions of framework agreements are followed. Internal reporting system on deviations and variances exists. Organization A has better contracts control and follow-up in investments. They have established routines, assessments and appraisal forms on ensuring trial period, guarantee and deliveries. When deviations are reported internally, the purchasing function in Organization A compiles a report and forwards it further externally.

Often, purchasing functions have input of professionals who have top competence in their professional areas, for example doctors in case of medicines, and who specify the needs and requirements before procurement. Professionals bring new competence to a contract's specifications, implementation and evaluation criteria before the contract is published. Thus, the contract puts consumer in focus and is consumer-oriented. It is not however practical to have professional input in all procurements owing to the high number of procurements in the annual wheel locally, regionally and nationally. Resources factor in terms of time would not allow. When complex projects are undertaken, for example construction of specialized units, professionals with required competence are hired to guide on contract formulation and follow-up. In normal construction projects, there are established standard contracts.

There is good cooperation between Organization A as a contractor and suppliers. However, the relationship is confined due to work ethics. The Public Procurement Act regulates conduct and interactions between public procurement officers and suppliers. The informant termed the relationship as good but arm-length.

Being a transition period, it is a challenge that the procurement staff have been absorbed in another organization, yet the procurement function in Organization A must function as before and needs resources and competence. The internal reporting systems on deviations and variances at the different health trusts and regional headquarters are not aggregated at the national level. This creates a problem of not being able to follow-up on a supplier who is delivering sub-standard goods or service. When deviations in prices are discovered, the person at the national level responsible for the contract can rectify the prices in their system. However, this is not reflected in the systems at the local level and adds to the problem of not following up with the supplier from the local level.

The biggest challenge is follow-up on framework agreements. The informant acknowledged that they have not been good enough, and they can do better. The fact that contracts are in a different place renders the process of following up on performance and milestones difficult. Access to contracts is relative unless the purchaser has a consultant/advisor role. At the local level they have invoicing plans which they can use to check on variances against payments.

The informant is more satisfied with the contract management process now than before and acknowledges that they have not been good at following-up all types of contracts, but also have been good at following up other types of contracts. Where they were not able to follow up, they could have done better and now that they know, they will be better. Contracts on construction work are available locally, hence simplifying follow-up on constructions. Although Organization A was not very good in contract management before the new arrangement, they did not leave it to suppliers to monitor themselves. Controls on invoices was done. There is much potential for improvement and informant is optimistic and welcomes the idea of functional merging with Health Purchases because this will lead to development of competence. There should be more engagement, more pro-active with suppliers to develop each other and the competences that each possess. This can help in learning the market trends out there, new developments which the purchasing people can make use of.

4.2 Findings in Organization B

The chapter presents the findings of the research in Organization B. The findings are grouped in an introduction which is a brief about the organization followed by the main section where the full findings are presented.

4.2.1 Introduction of Organization B

Organization B is a municipality on the west coast part of Norway. Purchasing in the municipality is organized under one purchasing organ called Konserninnkjøp. Konserninnkj ϕp is a purchasing cooperation created through cooperation between the municipality and 18 other municipalities in the region. Konserninnkjøp operates under and reports directly to the Chief Municipal Executive (rådmann). The head of the purchasing cooperation is a staff in the same cooperation and manages the cooperation on behalf of the Chie Municipal Executive. This organization is illustrated in Figure 12 below. The municipality operates $Konserninnkj\phi p$ on behalf of the other municipalities. $Konserninnkj\phi p$ undertakes procurement for Organization B as a municipal purchasing organization, and on behalf of all cooperating municipalities or any of the municipalities in the cooperation. Organization B and Konserninnkj ϕp is used in the thesis interchangeably to refer to the municipality which is a public organization. The purchasing cooperation gives the municipalities buyer power when dealing with suppliers. The participating municipalities are offered to participate in framework agreements, professional purchasing advice, as well as receiving professional guidance in performing competitive procurement and tendering, and publishing of tenders. As of June 2018, Organization B had 300 active purchasing agreements and approximately 100 planned procurements in progress.

Organization B has been in the limelight in the recent owing to malpractices and violation of the Public Procurement Act. The malpractices range from direct procurement without a competitive tendering process, omission of suppliers offers during tendering, bribery, nepotism and breach of the Work Environment Act by working overtime. The malpractices were reported to KOFA. Some of the cases were resolved with Organization B being found culpable and fined.



Figure 12: Organization of procurement in Organization B

The interview took place at Organization B's headquarters. Two procurement professionals were interviewed, the head of $Konserninnkj \phi p$ and a procurement adviser and controller. The two informants contributed equally to the interview. The interview lasted for one and half hours.

4.2.2 Interview findings in Organization B

The results of the interview with Organization B are presented in the following subchapters.

4.2.2.1 Strategic purchasing

Organization B has 6 procurement staff, including the two. All procurements and interactions with suppliers are digital. Diverse goods and services are procured from simple purchases to investment purchases like tractors and machinery. The organization's specialty is procurement. Professional advice and input are sought when procuring. Organization B works with users in needs specifications and purposes as outlined in the contract strategy. It does not have specialists to advise on specialized, or innovative procurement and hires on as need arises, for example during construction work. Organization B can perform procurement process for its own purposes as a municipality, on behalf of all partners in *Konserninnkjøp* or on behalf of any of the partners. Framework agreements are applied the same way. A framework agreement can be negotiated for Organization B, for all partners in *Konserninnkjøp* or for any of the partners. There are 75 institutions who are using such framework agreements.

Procurement starts with a contract strategy for procurement. The strategy is the basis of a procurement process. The contract strategy helps to make visible the plan for procurement,

show considerations and choices made in the planning, help utilize Organization B's skills and experience, undertake a risk analysis, study the market and plan for resources for procurement. The contract strategy in Organization A considers:

- The need and the purpose of the procurement
 - An objective analysis is done on whether there is need to undertake a tendering process, if framework agreements exist that cover the need, if the procurement can be sub-divided into several sub-contracts or if the needs will change with time
 - The contract type and terms, single purchases or framework
 - o Superior specification requirements, innovative procurements
- Economic and organizational impacts for example budget, life cycle costs, environmental costs, impact on other on-going operations
- Procurement procedures to be used, exemptions, negotiations, roles delegation, deadlines, need for specialists
- Market analysis, prior experience of the market, reserved contract
- Risk analysis of the process includes environment, work ethics
- Contract awarding criteria, evaluation model
- Contract implementation, resources for implementation
- Contract management
- Consideration of other relevant information to the procurement at hand

4.2.2.2 Competence and skills

Ordering is done on an electronic platform called Ehandel. However not all suppliers are on Ehandel and other ordering systems are used. Suppliers send catalogues electronically which are stored on Ehandel after approval. This facilitates an efficient procurement process as it is easy to access goods, suppliers and prices. Ordering electronically saves time which would have been used on calls, simplifies documentation, and makes the process traceable and transparent. Ehandel aids in day-to-day contract follow-up since a buyer can check order updates, trace deliveries, check variations on orders against invoices, volume delivered among other discrepancies. Ehandel can give statistics on a supplier such as volume transacted in each period.

Ordering is a two steps process. When ordering, the buyer orders electronically, and the order is sent automatically for approval by the unit manager who is responsible for his/her budget. If there is no budget for the purchase the buyer can postpone the purchase until a viable time. In contract management, the procurement staff has the main responsibility to control that the purchase is in accordance to existing contract. There is a contracts controller who controls that buyers purchase according to existing contracts. However, it was clarified that they don't have a dedicated role specific for contract management. All procurement staff share the responsibility to follow-up on contracts they are involved with when undertaking purchasing. Ehandel has an automatic control system that ensures purchases follow the two steps ordering process, that the prices in the invoices are the prices on the contract and receiving of goods. The system can analyse price changes by comparing prices in different periods. It is a policy in Organization B that all invoices should be electronic.

Organization B has inadequate resources to undertake contract controls. Current control is "reasonable" and would be much better if they had more resources. There is a question of the extent of contract controls based on Auditor General's report which advocates for complete control against necessary control. This dilemma arises because the Auditor General's report has through published reports in some occurrences criticized procurement practices in Organization B. The organization regards the Public Procurement Act which came into effect in 2017 as a good regulation which has simplified the process of public procurement. In their opinion Public procurement staff have more freedom to procure due to increased value threshold, simplifies process of obtaining suppliers' information and documentation and to rectify mistakes done by suppliers. The Public Procurement Act is good as it regulates how procurement is conducted.

4.2.2.3 Relationship management

Owing to developments in the recent as mentioned in the in the brief, Organization B stated they are more focused with contract controls. They have a contract management plan and an evaluation system. The contract management plan considers:

- The resources needed to follow-up the contract in the whole contract period
- Who has responsibility for contract follow up
- As a standard contract follow-up begins 6 months after start of contract. Evaluations before contract's end are done 4 months before contract expires. Evaluations are also performed if contract follow up is necessary before the 6-month standard period

- Control of supplier documentation
- Whether supplier is delivering according to the contract, maintenance agreements
- How discrepancies and variations in performance are rectified
- Routines to ordering, invoicing and delivery
- Predictability of prices and supplier behavior
- Fulfilment and control on environmental, social dumping and ethical business practices
- Any necessary amendments in the contract period

When an invoice does not correspond with catalogue on Ehandel, the purchase or payment is stopped. It's the buyer's responsibility whether to approve the variation and continue with the purchase, or whether to claim for a credit note from the supplier. Such variations can result to termination of a contract. Each variation or discrepancy is considered on its merit before decision is taken. The common discrepancies are lack of delivery and quality, i.e. late deliveries, and goods and services not delivered.

An interesting point of information came up during the interview. Organization B mentioned that in some purchases they can directly negotiate with a manufacturer and influence prices, usually because of volume purchased. The negotiated price which is usually lower than the wholesaler price is passed to the supplier and replaces the contract price. This is common in procurement of routine goods such as toilet paper and groves.

4.2.2.4 Sustainable procurement

There is a challenge following-up on green logistics and ethical standards. As a goal, Organization B is keen on sustainable procurements. The organization environmental sustainability terms require that transport (supplier) vehicles be Euro 6 emissions compliant or better by discharge lesser emissions. The type of procurement and market size play a role when setting the environmental requirements on suppliers. If the market is big, and suppliers are many, environmental standards are higher, and preference is for suppliers with established good ethical and environmental reputation. Organization B does not have the internal capacity to evaluate technically if the environmental standards are fulfilled. It relies on external evaluations like the Swan logo used for ecolabelling. Organization B insists on products with the Swan logo which identifies the product is produced in a sustainable

manner. Organization B has an evaluation procedure to control if suppliers fulfill the ethical and social requirements as set in the Work Environment Act. Suppliers can be notified of the controls before or they can be unannounced controls, especially in services with high risk of breach of the Work Environment Act, for example in cleaning services.

4.2.2.5 Contract administration

Contract administration is part of relationship and risk management and is highlighted here because of its influence on the two elements. Organization B requires and controls that procurements are only with suppliers with an existing active contract. Breach of that can lead to economic consequences, and the organization sued for procuring without agreements and their reputation will suffer. When contracts are terminated, controls are done on whether the organization is still procuring from suppliers with terminated agreements. Organization B has a system for evaluation and control when a contract is expiring. Before a contract's expiry, the following procedures are performed:

- Supplier is informed that contract nears end
- Supplier is informed if contract is to be continued in a transition period before a new contract comes to effect
- A meeting is planned with supplier to evaluate the ending contract where the following are evaluated:
 - o If the contract specifications suited the task
 - o If the contract performed as it should
 - o Any advice supplier can offer for a similar contract awarding
 - o Statistics of all deliveries from supplier
- Brainstorming if the contract should be amended before the next tendering
- If the contract terms were a hindrance to good contract performance
- Any needs which might have been omitted

An evaluation is done upon a contract's expiry which covers among others:

- If the contract's users i.e. buyers and purchasing controller are aware that contract is terminated
- Terminating the contract on Ehandel, and removing it from list of active contracts

4.2.2.6 Managing stakeholder interests

Access and inspection of contract contents after signing is allowed (a process called *innsyn* in Norwegian). The public and suppliers have access to contract details after authorization,

but business secrets are not granted access. Organization B provides for good relationship with suppliers. It is in the organization's interest that a mutual relationship environment exists. Supplier development and close collaboration is common in contracts for welfare technology where the municipality as the end user works tightly with suppliers to develop technology aimed at helping users with limited activity interaction to access services directly or through service providers to give them a meaningful life. Relationships contribute to good contract delivery and developing each other. Being over strict or difficult does not provide for good working relationships. Work ethics and the Public Procurement Act calls for restrain on interactions between public purchasers and suppliers. They consider it important to have good relations with suppliers.

Table 4 is a summary of the empirical results compared with the theory in contract management.

Table 4: Summary of interview results.

Procedure	Organization A	Organization
		В
	Executed?	Executed?
Preparing business case	?	Yes
Assembling team to manage procurement	Yes	Yes
Procurement specifications and requirements	Yes	Yes
Developing contract management plan	Yes (Sykehusinnkjøp)	Yes
Supplier qualification and awarding	Yes (Sykehusinnkjøp)	Yes
Drafting contract documents	Yes (Sykehusinnkjøp)	Yes
Service performance management	Yes	Yes
Contract administration	Yes (Sykehusinnkjøp)	Yes
Contract closure	?	Yes

5.0 CHAPTER FIVE: DISCUSSION AND ANALYSIS

In this chapter, the findings of the interview are explored and compared with the frame of reference from the literature review and theoretical perspectives in chapter two. In the summary and conclusions, the final output of the study is provided. The chapter is structured into topics based on the concepts in the frame of reference in chapter two. The frame of reference is illustrated again in this chapter.

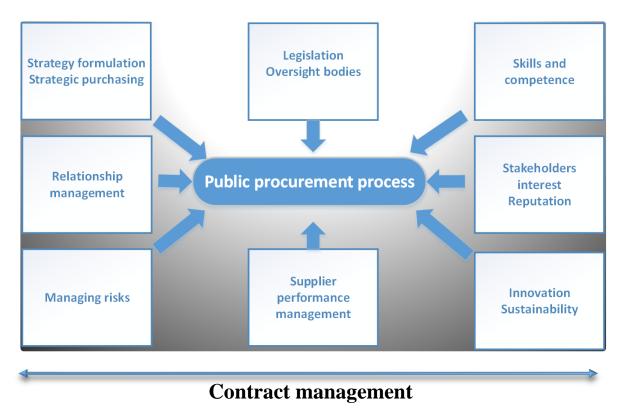


Figure 13: A conceptual model of the frame of reference.

5.1 Strategy formulation

Before undertaking procurement there is need to establish why a contract is necessary or if there are other purchasing mechanisms for the contractor and the seller. The purpose of the contract should be clear from the beginning. A business case is prepared that sets out the contract objectives, seeking to establish how the contract will meet the procurement needs, the success factors and the risks. The pre-award phase in the procurement strategy is relevant in formulating contract strategy and ensures the right contract is made and lays the foundation for contract awarding. When contracting for complex projects a business case can be worked together with market actors who can undertake such. Good planning at this

stage ensures that; the right contract is in place around which a good business relationship can grow, puts the right people in place to manage all aspects of the contract, allocates resources to manage the contract and puts in place a communication mechanism to provide feedback on supplier performance (Office of Government Commerce UK, 2008).

A good contract strategy should obtain value for money when adhered to. The supplier should be encouraged to find innovative and efficient solutions. Incentives can be given or a returns sharing formula agreed on the gains achieved. Provisions can be included requiring gradual reduction in contract costs when the costs for services delivery are reducing due to service improvements. An open book when applied helps track suppliers' costs and profitability expectations. This can be used to calculate profit sharing. An effective contract should consider the changes in time, costs, quantity and quality standards throughout the contract's lifecycle. A pro-active approach with guidelines to manage risks in the duration, escalations and relationships will ensure a smooth execution, financial savings, improvements in quality and avoidance of service failure. It is not possible to identify all the issues that can arise in the duration of a contract. Procurement professionals should use their experience when considering circumstances and constraints of a particular procurement and if necessary seek professional advice in order to comply with relevant legal and procurement policy requirements (Office of Government Commerce UK, 2008).

The purpose for a contract strategy as indicated by Organization B in the interview was to establish why the contract is required, make use of the purchasing experience, undertake a risk analysis, market evaluation, plan for resources and provide the foundation on which procurement is carried.

Empirical findings prove that when formulating a contract strategy definition of purpose and procurement needs, contract type, specifications, financial and risk analysis, and negotiations are performed across the two interviewed organizations. This converges with the works of (Brynhildsvoll, 2018, Difi, 2011) and Simila (2010) whose framework on contract strategy is illustrated in Figure 14 and Figure 15.

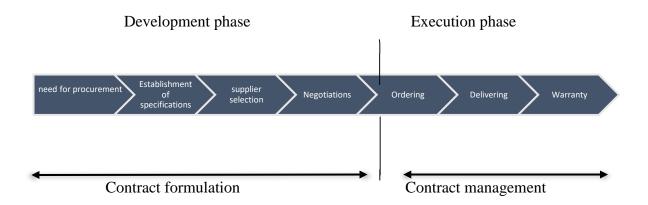


Figure 14: Contract management in procurement process (Brynhildsvoll, 2018).



Figure 15: Contract management in a project (Simila, 2010)

The development phase as illustrated in Figure 14 starts early in a procurement process. It aims to engage the market and suppliers. The contract formulation phase starts with specifying needs and specifications and ends when parties agree on the contract's contents i.e. the terms and conditions for all parties that will regulate the transaction. The execution begins after the contract is signed and the parties begin to fulfill their obligations. Obligations are fulfilled by delivering the contracted goods or services, payments are made and any warranties or guarantee period has expired (Brynhildsvoll, 2018). From the data collected, Organization B responded and narrated how the above procedures are performed.

5.2 Legislation and regulations

Public procurement in Norway is governed by the EU regulations and local legislation. The Public Procurement Act does not apply to public passenger transport. Public contractors can reserve the right to a public contract to support businesses and employment programs for the vulnerable, for example laundry services to support employment for the handicapped.

Organization A states in its procurement strategy which is available in their website that all procurements are to be in accordance with the laws governing public procurement, performed with integrity to safeguard public confidence and social responsibility. High standard of business ethics, ethical performance of the processes and non-discrimination are the fundamental requirements in procurement. Organization A endeavors to undertake procurements in a competitive, open, transparent and verifiable process. The strategy proposes constructive cooperation with suppliers based on trust, openness and mutual respect.

In their procurement policy, Organization B promises that all procurement will be undertaken in a cost-effective way in accordance with applicable regulations, and with utmost integrity which considers social responsibility. The purchasing manager is given overall responsibility to oversee procurement and give guidance, ensure quality of the processes, create value addition and secure most effective use of resources based on best business principles and non-discrimination. The purchasing manager acts the custodian of public resources on behalf of the *rådmann*. The procurement strategy of Organization B is categorical on quality of the procurement process, adherence of procedures and good business ethics from the planning to the contract. All procurements should be documented. Departments are given responsibility to prepare need specifications, give specialist input in cooperation with the purchasing department before procurement is undertaken. Annual reports, analysis of undertaken and planned procurements, and initiatives in place to safeguard the procurement policy.

In the literature review and interview, framework agreements are mentioned prevalently. Both Organization A and B use framework agreements. It is important to look at why use of framework agreements is prevalent as opposed to having single contract for each specific items they procure from a supplier. Framework agreements are mutual agreements whereby a contractor has the freedom to procure in each period under the agreement and the supplier guarantees to deliver on specific fixed terms, usually a fixed price. Frameworks do not impose an obligation on the purchaser to use the agreement when purchasing the product in question. Framework agreements are usually used when purchasing involves regular purchasing of a certain product group. Framework agreements give the advantage of not having to publish or publicize a competitive tender every time a procurement is undertaken, as required in conformity with regulations. It offers the contractor flexibility and savings

because no new contracts are needed when procuring in duration when the framework is in effect (Difi, 2017). A framework agreement has a period of up to four years.

5.3 Competence and skills

Audit reports by the Office of the Auditor General indicate that procurement professionals in the public sector are loyal in following and using framework agreements. Framework agreements give scale advantages and in most of the cases better prices than the market will offer. However, there is a problem in sticking to agreed prices and controlling that invoiced prices correspond to the framework agreements. The Auditor General's reports found that framework agreements inflate prices higher than prevailing prices in the market in certain categories, for example electronic devices such as mobile telephones, household appliances and hardware. This means that use of the agreements is not economically advantageous in all purchases. Problem with prices is prevalent when the framework prices are not documented electronically, for example as in the E-handel platform and control is done manually. Reports show that procurers sometimes contravene regulations when procuring under framework agreements and exceed procurement value thresholds as stipulated in applicable regulations. When value thresholds are exceeded, publication of contracts is not done on Doffin as required and this results to direct procurement in contravention of procurement regulations. A general observation in audit reports posits that those with highest authority in public purchasing have not established control routines to monitor framework agreements. Findings in the reports are made whereby framework agreements are entered into and rarely used beating the economic sense of the agreements in the first place (Innlandet Revisjon IKS, 2016a, Østgård, 2018, Bærum Kommunerevisjon, 2009, Innlandet Revisjon IKS, 2016b). It was earlier mentioned in the introduction part of the research findings in chapter four that both Organization A and B have in different occurrences been found guilty by KOFA of breach of public procurement regulations. This thesis does not seek to investigate the activities leading to the malpractices, but it begs the question whether the audit reports explains what could have contributed to the malpractices.

5.4 Risk management

A contract is meant to minimize risk by facilitating decisions and actions to control risks. Poor specifications are often a major cause of financial losses which culminate in the buyer paying too much or product not meeting the needs. Early involvement of suppliers can reduce risks in the specification stage. Apart from being able to meet the product requirements, suppliers should be appraised on how it will be like to work with them (Russill, 2010). Suppliers can be evaluated on their ability to delivery accuracy in terms of time and quantity, their response to order variations, communication ability, cost management, problem solving ability, and innovative solutions (Russill, 2010). Poor negotiating skills can lead to less than optimal outcomes. Different units in an organization should negotiate collaboratively as one instead of different similar negotiations to marshal the buyer power. Focus should be emphasized more on the total cost of ownership as instead on the initial price.

To reduce risks strategic supply management is important. An approach based on the Kraljic's matrix can be applied to analyze the supplier market and minimize suppliers' risk. Understanding the main players in the market based on the Kraljic's matrix can help come up with contract strategies on how to manage different suppliers. The public sector procures different assortments of goods and services ranging from simple items as toiletries, to complex procurements such as heavy-duty equipment and construction projects. A possible purchasing portfolio matrix of public procured goods and services against value/risk can give the following contract management strategies as illustrated in Table 5. The table considers some of the framework agreements signed by Organization B as of June 2018 and positions the agreements on the purchasing matrix.

Public procurement lacks incentive systems to reward and motivate suppliers. Lack of incentive schemes in public procurement can be explained partly by transaction costs economics discussed in chapter two. Both principal and agent are risk averse. Low prices being a major decisive factor in awarding of contract in the public sector, the principal is most risk averse and invests least possible with expectations of leaping maximum benefits from the relationship. Since the supplier is not compensated for extra effort in innovation, supplier is not motivated to invest extra resources to perform quicker, efficiently or cheaper to the benefit of the contractor. Supplier thus invests enough effort to fulfill obligations just to the point where he is compensated. Public procurers are agents to many sectors. Administering and delivering incentives goes over their resources in serving many interests

Table 5: Contract value/ risk matrix based on procurement value (cited in Queensland Government (2018) and Kraljic (1983)).

High	Leverage	Strategic	
	PipesPlumbingMotor vehiclesTarmackingExcavation	 Recycling plant contract Bridge Hydro-power dam Pipeline Sewage Consultancy services 	
Value	High value contract (Framework agreement used)	Strategic contract	
>	Non- critical	Bottleneck	
	 Office stationery Toiletries Food items Entertainment Furniture 	 Medicines Laboratory equipment Unionized labour Electricity Telephone services 	
Low	Standard contract (Framework agreement used)	High risk contract (Framework agreement used)	
	Low	Risk High	

5.5 Relationship management

A report commissioned to investigate why the public procurement staff in some identified municipalities breach procurement regulations (Norge Rikrevisjonen, 2011) found that the public procurers had poor supplier management abilities. The report discovered discrepancies between the contracts and accounting systems where invoice payments and contract prices fail to tally, use of terminated framework agreements, lack of competence to understand the procurement regulations and to undertake procurement controls, lack of priority by leadership to prioritize procurement as a key focus area, and applying assumptions from earlier procurement experiences to manage current procurements. Risk analysis, internal evaluations and control on purchases were rarely done. Management did not make use of financial reports which could give useful information when undertaking procurement. Where organizations were in a purchasing cooperation, procurement staff at

decentralized levels were lax to carry out internal controls and left it to the purchasing cooperation to plan, and undertake contract follow-up of large and complex procurements (Norge Rikrevisjonen, 2011).

Performance management is a requirement to ensure the supplier is delivering value for money by consistently monitoring and evaluating compliance on the contract delivery terms such as the agreed service level, quality of goods and services delivered, maintaining milestone objectives in case of projects and managing the relationship between supplier and contractor. It starts after the contract has been signed and is operationalized. A governance structure on how supplier management is carried out, the performance metrics and reporting mechanisms are decided during the pre-award phase. Relationship management, internally and externally, is pivotal to managing performance. Performance measurement should be selective and proportionate to the contract value and importance of the contract to an organization (The Chartered Institute of Purchasing and Supply, 2007).

A supplier management framework states objectives, provides clear, meaningful and objective supplier performance assessment metrics, provide incentives to the supplier to be innovative, and exceed agreed performance standards (National Audit Office UK and Office of Government Commerce UK, 2008). The supplier management framework assigns roles, responsibilities and resources to the management process. The framework includes key milestones and deliverables, reporting requirements and KPI's, how disputes are managed, systems to monitor expenditure, compliance with legal standards and policies, documentation of processes, and schedule for audit and review meetings. Contractor has main responsibility to monitor and account for deliverables. This can be done through counter-checking accuracy of deliveries, getting feedback from end users and site visits. The aim is to collect and analyse information to ascertain the contract is delivering. It should not be the intention of the contractor to control or monopolize the supplier relationship through monitoring, but a way of improving performance. Suppliers are encouraged to give own analysis, feedback and opinion on transacting with the organization.

A good relationship is important between a contractor and a supplier. This can be established in the early engagement phases of the procurement process especially during the competitive dialogue and negotiations stage. Regular communication and communication channels should be established. Communication is used to avoid escalation, e.g. through contract

manager. A contract depends on the behavior and relationship regulation of the parties. There should be communication of the desired relationship and behavior (Simila, 2006). Not all supplier relationships are the same. Supplier relationships depend on (Office of Government Commerce UK, 2014):

- The supplier market structure
- Type of relationship the contractor wants, e.g. arm-length, long-term
- Complexity of service
- Contract duration

A contract value and risk determine the degree of monitoring. Contracts involving high value, high-risk goods should be closely monitored with frequent meetings on site or supplier premises. Bottleneck goods of low value but significant to the organization require less frequent but regular monitoring, high value and low risk leverage goods may require even monitoring (The Chartered Institute of Purchasing and Supply, 2007) as illustrated in the Kraljic's matrix in Table 6 below.

Table 6: Product value vs degree of monitoring.

gh	Leverage products	Strategic products
	Even regular monitoring	Close monitoring with frequent meetings and supplier visits
	Non-critical products	Bottleneck products
	Less frequent monitoring	Less frequent but regular monitoring
I	Low Low	Risk

As custodians of public resources, public procurers are under constant watch to ensure that value is delivered for every cent of public money spent. Contract monitoring requires resources in terms of time and competent manpower. One of the problems that mentioned by both the interviewed organizations was lack of enough sources. In their words, they state

they do not have full resources required for contract follow-up, and they can do better if they had enough resources. Thus, both organizations perform essential contract management activities within the few resources they have.

Organization A acknowledged that satisfactory controls were not done, and the staff left suppliers to monitor themselves for reasons such as not understanding the contract, lack of information on whether the contract prioritized on quality or price, and for lack of competence. Controls were done haphazardly leaving suppliers with leeway to monitor themselves. When variations in deliveries are discovered and reporting done, the remedies or action taken on suppliers, and update of the same is not reflected in the purchasing systems of the organization. It was named that non-conformance of suppliers is reported from the local hospital trust level. Such reports are not followed-up or there is no evidence to it. It is probably right to assume that the reports are done only to adhere to procedures. At the national level, Health Purchases updates contracts, for example prices but the same is not reflected in systems at other levels, according to the informant. Information exchange is not flowing both ways and thus not effective. In the re-organization of 2016 which led to the formation of Health Purchases, the procurement staff at the regional health authorities and local hospital trusts were absorbed in the new organization. This affected staffing and procurement operations at Organization A. This complicated further the process of supplier monitoring.

Organization B has an established procedure for controls and reporting to guide contract follow-up and evaluation of service delivery. Procurement staff at Organization B have an individual responsibility to evaluate contract compliance in any purchase one undertakes as a buyer. This is done on the Ehandel electronic platform used for ordering. The procedure for controls in Organization B includes:

- Controlling documentation accompanying deliveries
- Oversight whether supplier fulfills required service level
- Whether variations, late deliveries, defects are corrected satisfactorily
- Routines for ordering and invoicing
- Suppliers' predictability in pricing and invoicing
- Control and fulfilment of environmental, social dumping and ethical trade requirements

- Whether necessary training has been provided
- Whether the delivery corresponds with the Ehandel catalogue
- Supplier's assessment of the contract

Before a contract ends, Organization B meets with the supplier(s) to appraise the contract collectively and uses the appraisal as a reference in further procurements. The appraisal considers among other things whether the contract suited the magnitude of the task, whether supplier follow-up contributed to better performance of tasks and opinion of the supplier for further improvement. Organization B stated that owing to the bad publicity in the recent times as mentioned earlier in the findings, which include payments for irregular overtime, the organization is more focused to improve contract follow-up. As a rule, Organization B undertakes the first contract evaluation six months after a contract is operationalized, i.e. after the organization starts to procure based on the contract. Not all contracts are the same, and the evaluation routine considers whether there is need for an evaluation before the six months. A routine evaluation is also performed four months before a contract ends.

All the respondents agreed that they keep relationships and interactions between public procurement professionals and suppliers at essential level. Relationships are kept at a necessary essential level to facilitate transactions. Even where supplier development is the case as in Organization B, interactions are kept at necessary and regulated through the contract. The Public Procurement Act and the EU legislation hinders partnerships and relations in public procurement rendering the process rigid and bureaucratic. Relationships are kept at arm's length. With public procurement facing many competing priorities, and productivity pressure to deliver more with less, politicians regulate spending and are watchmen of how public money is spent. Public responsibility, competitive frameworks and the work culture in the public sector hinder development of supplier relationships and trust (Holma et al., 2013).

The process of public procurement is cost driven with much focus on the lowest price and economically advantageous tender. This is complicated further by the complex legal regulations which suppliers must conform to. There is need for a shift from arm-length relations to strategic collaborative partnerships where each partner gains from making the relationship more successful (Holma et al., 2013). The ever-increasing competing priorities is partly due to defragmentation of the public sector unbundling services which require more

coordination and systematic procurement procedures. The lack of resources especially in the legal competence and administration hinders partnerships in public supply (Holma et al., 2013).

The new Norwegian Public Procurement Act which came into effect in January 2017 promotes private-public partnerships, and innovative procurements through partnerships. One of such partnerships is called innovation partnership. Innovation partnership promotes "close collaboration between buyer and supplier (product developer). The procedure facilitates close collaboration between the business and suppliers to develop new goods, services and construction work to solve specific needs in a business (Anskaffelser.no, 2018)". Unlike other private-public partnerships, innovation partnership can only be used to procure goods and services not currently available and offered in the market. In innovative procurement partnerships the government promotes collaboration with the end users and supplier market to create user-friendly specifications, a contract award criteria that favours innovation and new ways of thinking and a contract terms that allow innovation (Anskaffelser.no, 2018). Innovation partnership incorporates innovative procurements for effective and sustainable service delivery. Sustainable procurement means acquiring goods and services which not only means value for the organization, but also for the society by reducing wastes and improving efficiency of resources, reducing risks to the environment through green logistics and supply chains, and shun social dumping. The lack of effectiveness in traditional procurement setup has led the public sector to implement new methods and collaborate institutional arrangements between public and private sector to help reduce transaction costs, mitigate risks, promote innovation and economic growth (Nuojua, 2015). The EU legislation allows for competitive dialogue with suppliers. Competitive dialogue allows a procuring public authority to engage a maximum of three suppliers in a competitive dialogue with the aim to partner and offer solutions on the procurement at hand, usually complex projects. Contractors are limited to the number of times they can apply competitive dialogue (Office of Government Commerce UK, 2014).

The two interviewed organizations do not have incentive schemes to motivate suppliers to improve on service delivery or come up with innovative solutions. Organization B works tightly with suppliers in developing adapted welfare technology products in care services. Arrangements such as bonus schemes, share-in-savings incentives or automatic contract renewal are non-existent. Research suggests that an incentive system requires not be

monetary based. A motivating factor can be based on the probability to renew the contract, value of future profit earnings can act as an incentive to reduce costs on the supplier side to continue serving the contract (Dalen et al., 2006). Relational contracting give motivation through interpersonal relations and identification of a common commitment. Partnering motivates performance and act as incentive to perform quicker, efficiently and cheaper.

5.6 Strategic purchasing

A look at the list of framework agreements in Organization B as of June 2018 reveals 300 purchasing agreements signed with over 70 suppliers, and 100 planned procurements in progress. Considering that Organization B has 6 procurement staff as stated in their interview, with over 300 contracts to manage, and call-offs to manage, the task is overwhelming. An organization in a supply network is dependent on the different resources that a supplier can provide. Purchasing is a link to the supplier's production facilities (Hagberg-Andersson et al., 2000). Gadde and Håkansson (1993) suggest that an organization can structure its supply network either according to how suppliers are organized or according to the number of suppliers. By organizing suppliers into systems of suppliers, different suppliers are grouped into tires depending on their activities and resources, reducing the number of suppliers the buyer is in direct contact with (Hagberg-Andersson et al., 2000). By reducing the number of suppliers, the buyer reduces costs and improves quality. Suppliers in a supply network depend on their size, competencies, resources and their knowledge and activities (Hagberg-Andersson et al., 2000). Hagberg-Andersson et al. (2000) in their study learnt that buyers prefer local suppliers in the first tier because of regular contact, easy to manage and similarity in language.

With so many suppliers and few resources to manage them, Organization B can focus on reducing the number of suppliers and put effort on developing relationships with the remaining. Dealing with a smaller number of suppliers impacts positively on the quality of purchases. There are costs tied to managing the many purchasing contracts, many of which are duplicated i.e. having different suppliers supplying the same category goods and services. It is advisable to qualify the most eligible suppliers and deal with a few who are easier to manage. Category management can reduce duplication of contracts. Many of government needs are procured in a disaggregated manner resulting in diminished buying-power and market profile (Federal Information & News Dispatch, 2016). Category management is a solution to managing many procurements in an organization by managing categories of

common spend with collaborative decision-making, promoting strategic sourcing in a structured process which analyzes spending and using this information acquires goods and services more effectively and efficiently (Federal Information & News Dispatch, 2016). In category management there is coordinated acquisition and management of common goods and services, leveraging on an organization's buying power and reducing unit prices. By applying effective demand management practices, competition and supplier relationships are improved. Category management helps avoid duplicative administrative costs by reducing number of suppliers thus reducing costs of procurement and contract management (Federal Information & News Dispatch, 2016).

5.7 Contract administration

Contract administration is part of relationship and risk management and merits a discussion on its own. How contract administration is handled impacts greatly on a contract's relationship and exposure of risks. The activity of contract administration is involved with the practicalities of contract maintenance, routine administrative and clerical functions to manage changes to the contract as they arise. Changes during the contract period are bound to happen. It is important how changes are managed and the relationship between contractor and supplier sustained. A good contract should allow flexibility on need to improve and maintain good relationships between the parties. Changes should be managed in the original context of the contract to avoid ambiguity and misunderstandings about roles, responsibilities and the actions to be taken in any given situation (The Chartered Institute of Purchasing and Supply, 2007). Contract should be updated as variations are done and value for money ensured. Variations in contract should not be used to cover supplier ineffectiveness or inability to deliver.

The main activities performed under contract administration include (Industry Capability Network, 2017):

- Contract variations and change control
- Cost monitoring
- Ordering procedures
- Payment procedures
- Management reporting
- Notice of contract closure and termination

Variations can be contractor or supplier initiated. They include changes due to financial problems, change in specifications, changes in schedule plans or delay in making decisions. Other changes are beyond the contractor and the supplier control. Such changes may be due to weather conditions, government legislation, health, safety and environment requirements, or increased project costs due to unforeseen conditions. Changes and variations should not be exploited as a tool for opportunistic behavior. Suppliers should not change specifications to expand a project's scope, and thus gain through extra billing and extended period on the contract. The contractor as the principal should not amend a contract with the intention to benefit further from the contract by introducing changes which cannot be supported by a business case and are outside the scope of the original contract without regard to the resources of the supplier and disregard of the contracting process. Both the principal and agent invest in the contract. Any changes should be duly considered if they are necessary. Dialogue and good relationship management should be used when changes and variations are deemed necessary.

Contract administration is a controlled process. There should be an agreed process between the contractor and supplier on how changes are effected. Changes and variations should not be in conflict with legislation, procurement regulations and financial delegation levels (Office of Government Commerce UK, 2014). Reasons for the changes should be documented, failure to which may lead to misunderstandings and contractual disputes. Senior management with power should be kept informed of contractual changes and variations as they occur to ensure that problems are acted upon as soon as possible. Changes should be specific in documentation and reporting and outline the exact changes expressly as opposed to being vague or implied. Oral changes are invalid. The people involved in procurement should be involved when significant changes to the contract are undertaken. Changes impact on time, cost and quality of the project. Representatives of both the contractor and supplier should review and authorize changes. Senior management authorization is required to ensure that only those requirements which can be justified in business terms are added to the service of the contract (National Audit Office UK and Office of Government Commerce UK, 2008). Where changes involve savings on the part of the principal, there should be a gains sharing mechanism as an incentive to the supplier for achieving the savings. Where higher risk is envisaged, both parties should be pro-active to caution against impacts of the risk.

Some of the important points to consider when effecting contract changes include (Office of Government Commerce UK, 2014):

- Adhering to the terms and conditions as stipulated in the contract
- Assessing the necessity of the changes. Assess whether there is an underlying performance problem
- Assessing the impact of the changes on the contract's price
- Proper documentation and reporting of the changes, and updating the contract to reflect what is happening on the ground

Good contract administration can be supported by keeping an easily available copy of updated contract to support correspondence and contract information, using software to record key information such as supplier contacts and services they provide, and continuous update of contract information such as record of payments, milestones and risk assessments (Office of Government Commerce UK, 2014).

Organization B has established routines for effecting changes and variations in contracts. This is done in collaboration with supplier. An evaluation is done during and before the end of the contract's period to ascertain if the changes were effected according to the contract agreement, if documentation and reporting of the changes was done as required and if the changes affected the contractor supplier relationship.

It is mentioned in the interview that in some purchases Organization B can directly negotiate with a manufacturer for lower prices. The agreed low price is in turn passed on to the supplier who supplies the products in question at the manufacturers price. The supplier or wholesaler is not involved in the negotiations and the organization's motivation stems from the desire to leverage on the large volumes of the product that it purchases. This is not common in procurement agreements.

Contract termination is the final stage in contract management. Contract termination can occur prematurely when the agreed conditions and deliverables are not fulfilled, or after completion and fulfilment of the contract. If the contract has an on-going need for supply of goods and services, the contract may be extended, or the contractor initiate a new bidding process. A contract review will then be carried out to find out among others if the contract met the needs and if it will meet future needs, and whether the organization achieved value.

Organization B has a contract termination procedure. The procedure informs a supplier that a contract is ending and plans a termination and contract review meeting with the supplier. The contract review meeting provides a forum to examine:

- If the contract was suitable for the task
- If the terms and conditions were a hindrance or promoted better performance
- Statistics of all deliveries in the contract period
- Proposals for future contracts
- Supplier is informed if contract will be renewed

Termination of a contract is finalized by removing it from the ordering system and record of active contracts.

5.8 Limitations of the study

Only two public organizations were studied which renders the findings unsuitable for generalization. If the requests for more information and subsequent interview probes had materialized, the information would have contributed immensely to the research. The informants made a choice that their names and those of the organizations should be confidential. The study however is publicly published. The choice to be anonymous renders further research on this study not plausible and curtails development of knowledge and the contribution it would have made to the study of purchasing.

Procurement in Organization A is organized in three levels, what can be termed as level 1,2 and 3 with level being at the top most level. Organization A is at level 3. The research would have benefited further by interviewing procurement staff at level 1 and 2.

5.9 Summary and conclusions

This study provided the opportunity to explore the procurement function in two public institutions in the Norwegian public sector. Insightful information on how public procurement is conducted was provided by informants who are public procurement staff. Through the interview they narrated how public procurement and the activities thereon are carried out. The respondents named also the challenges faced. Through discussion and analysis of the interview results, the case study sought to explore the findings to answer the research questions which are;

What activities and strategies do public organizations perform in undertaking contract management?

By answering the above question, a second question was born from the findings and the literature review and the study sought to find the relation between the empirical findings and theory. Thus, the second research question;

Is contract management practice among public organizations in line with theoretical perspectives?

The study found that the performance of contract management activities and strategies are empirically grounded and supported by theoretical perspectives of contract management in public procurement. How contract management in public procurement is performed fits in the model frame of reference. Strategy and strategic planning of the purchasing process, legislation and regulations guiding the conduct of public procurement, the competence and skills of the procurement staff, risk analysis and management, managing supplier performance and relationships, strategic purchasing and the system of managing relations and risks through contract administration influence the outcome of contract administration.

The study found that contract management is part of the strategic plan for procurement in the public organizations interviewed. A contract management plan is developed in the prequalification stage. A team to manage the process, resources and a reporting structure are established. Input of specialists is sought in the pre-qualifications stages to help with need specifications in complex procurements. The structure for controls and reporting differs from organization to organization. Some have a direct structure where the procurement staff as buyers directly monitor suppliers to confirm that the delivery is per the agreed terms and conditions, and in case of variations action for remedy is initiated by the buyer by either stopping the purchase or other remedy agreed with the supplier such as issuing a credit note. The buyer performs controls when ordering, and before payments are made. In other organizations controls are done but the buyer does not intervene directly with the supplier but escalates to a higher reporting authority. In case of variations the remedy is handled at a higher level and at times without the knowledge of the buyer. Such a bureaucratic structure hinders proper contract management.

The research found contract management activities performed in the two organizations to be: confirmation and counterchecking of invoices and delivery notes against the agreed prices, computerized approval and rejection based on price conditions in the ordering system, a two-step ordering system, site visits, feedback from consumers, contractor negotiating prices directly with manufacturer on behalf of the wholesaler and supplier being asked to provide statistics of all deliveries made during the period of a contract. The organizations buy goods and services from suppliers with existing active contracts. Suppliers are informed when a contract nears termination. Terminated contracts are removed from the ordering system and archived as inactive. Supplier relationships are valued. The two public organizations have essential cooperation with suppliers and engage them in continuous even evaluations and as part of research and development to find areas for improvement. Suppliers cooperation is regarded as important for success of service delivery. Essential cooperation is necessitated by the Public Procurement Act which regulates ethical conduct and interactions of public procurement staff with suppliers. Close interactions with suppliers are not common to avoid crossing the ethics line. Economic incentives are not used to motivate suppliers.

Public procurement function faces challenges of understaffing, lack of experienced staff with skills to monitor delivery of goods and services, lack of competence to understand contract specifications, pressure to conform to legislation and fulfil stakeholder expectations, a rigid bureaucratic system with need to balance between the interests of the public, politicians and regulating institutions. High number of contracts pose a management problem because some staff do not understand what a contract prioritizes. Many framework agreements are duplicated, meaning there are many suppliers of the same goods to manage. Strategic purchasing through category management would reduce duplication of contracts, reduce costs tied to procurement and contract management, and promote effective and efficient demand management practices. Skewed reporting systems hinder a transparent control system. Suppliers in one of the organizations are left to monitor themselves can get away with inefficiencies. This can lead to unaccountability of public funds.

The two organizations regard the new Public Procurement Act of 2017 as an improvement as it allows higher threshold of purchases to be made without the rigor involved in publicizing procurements. They regard the act important in regulating the conduct of procurement, easier access to information and documentation, and has made it easier to rectify mistakes with suppliers. Contract management is a focus area and the organizations are focused to improve reputation regarding negative publicity from the Office of the Auditor General and KOFA. The Auditor General's reports pose a dilemma to the public procurers

interviewed. It is not fully clear what is meant by complete control of public procurement as proposed in the reports.

5.10 Further research

It is indicated that the findings in this study do not qualify for generalization. The public sector in Norway consists of organizations at the national, county and municipal levels. The two organizations studied are at the national and municipal levels. An extensive study research based on the frame of reference in this study is recommended to examine more public sector organizations at all levels.

Appendix

Appendix 1

Interview guide

- 1. Could you introduce your organization?
 - What is your role?
- 2. Describe the purchasing and procurement process in your organization?
 - How is purchasing organized?
- 3. Contract Management

Would you describe the contract management in your organization?

- What are the reasons for contract management?
- How is contract management organized, or planned?
- Who is involved, roles, and responsibilities?
- What are the requirements in contract management?
- What activities are performed?
- How do you measure supplier performance?
- Is post contract management performed in all procurement contracts?
- Does the organization nature influence contract management?
 - Regulations?
 - Resources?
- How much time is spent on contract management?
- 4. How is compliance to contract terms during contract administration?
 - How do you manage changes in contracts?
 - How can you describe the language used in writing contracts?
- 5. How are contracts stored such that those who are responsible for contract management have access to the contracts?
- 6. Describe the contractor- supplier relationship in contract management

- What is the level of supplier involvement?
- 7. How satisfied are you with contract management in your organization?
 - What have been the benefits? Example of a project where it has been applied
 - Would you suggest changes to how it is performed today?

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