Faculty of Political Science

MPA-thesis

*Alternative Strategies for Public Real Estate Management in Iceland*

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Abstract

Methods and strategies in public real estate management in Iceland are examined in this thesis and a comparison made with the other Nordic countries. The development in Iceland is reviewed 40 years back but in the other countries the period is 10 to 20 years. The present system in Iceland is based on laws passed in 1970 with only minor changes to date, in spite of noticeable changes in the field during this period. It is therefore logical to re-evaluate public real estate management in Iceland, considering that the other Nordic countries performed such an evaluation from 1992 to 2001.

Information was collected from written material and at annual meetings of the directors of similar Nordic agencies of the Icelandic Government Construction Contracting Agency (Framkvæmdasýsla ríkisins) and Government Real Estate (Fasteignir ríksson). Nine categories of public real estate are compared and then examined how they are managed. The results of this comparison are presented in a table showing a considerable convergence in the management methods and strategies, excluding Iceland, although a clear difference in emphasis is evident.

Theories on New Public Management, NPM, were studied as well as the theory on the Chain of Command, and these linked to the discussion of public real estate management. To further explain the present system in Iceland, the setup of construction committees and types of agencies is also examined in the thesis.

In light of the distinct characteristic of the Icelandic system the author considers it reasonable to examine what alternatives the Icelandic authorities could have and proposes five options. Each option is discussed, advantages and disadvantages are stated and an attempt is made to rank them according to their feasibility.

The conclusion is to propose a total re-evaluation of the Icelandic public real estate management system and then to pass a new law to cover the whole field.

This is a translation of a thesis written in Icelandic under the title:

Valkostir við skipulag fasteignastjórnunar í ríkisrekstri á Íslandi
Foreword

This thesis is the product of a Master of Public Administration (MPA) research carried out at the University of Iceland under the supervision of Professor Gunnar Helgi Kristinsson. The research project is 30 credits out of the 120 credits needed to complete the MPA degree, and was carried out in the period of September 2008 to December 2009.

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1. Introduction

Housing facilities are very important from the viewpoint of ministries and public organizations as housing provides the framework for the operation and can influence job satisfaction and thus the productivity of the employees as well as having a certain image value in itself. Furthermore, the organization of public real estate management is closely linked to innovation in the construction sector where the public authorities have vital obligations.

The arrangement concerning construction, ownership and management of real estate for public organizations has for a long time been debated by politicians, both in this country and in the countries we mainly compare ourselves to. The debate mainly concerns whether it is more beneficial for the state to construct, own and operate the real estate in question or whether it is more beneficial to hand it over to the private sector – e.g. the so-called real estate companies. In the cases where the real estate is managed by the public sector it is also disputed whether it should be done by specialized real estate entities or whether the ministries themselves or agencies under them should take on this role. For the ordinary citizen it seems like the preference is linked to traditional politics so that right-wing party politics seem to favor privatization but left-wing political parties seem to be inclined to favor state run organizations.

Research

This thesis explores the structure involving the construction, ownership and management of real estate used by the public sector in the countries we mainly compare ourselves to, especially the Nordic countries. The development in these countries in the last few decades is studied and concluded whether there have been any major changes in the methodology and strategy through the years. Also, an attempt is made to evaluate whether there is a convergence in the methodology or strategy in these countries and if a typical Nordic public real estate management model exists. The incentive to conduct this research is based on the fact that the author maintains that these affairs are carried out differently in Iceland than in the
comparative countries through knowledge acquired in the sector through the position of the Chief Executive of the Government Construction Contracting Agency during the last ten years.

**Research material**

The thesis explores theories concerned with New Public Management as this ideology has greatly influenced this sector of public administration in the Nordic countries in the last few decades. Also the Chain of Command will be studied in relation to the topic, with special emphasis on authority and responsibility and whether there is a correlation between authority and responsibility in the structure of the public real estate management that has been implemented in Iceland in the last few decades. Furthermore, the categorization of public organizations with regard to tasks, responsibility, scope of power and administrative power of their directors will be examined.

**Research method**

The author gathered information in Iceland and the other Nordic countries on the methodology and strategies used for public real estate management. In order to restrict the scope of the research the main emphasis is on real estate owned or used by ministries and public organizations and as a rule municipal real estate is not included and only referred to in specific instances. To clearly illustrate the field of public real estate management in the countries concerned, the buildings were grouped into nine categories.

Information was gathered both from written material and in annual consultation meetings of the directors of the sister agencies of the Government Construction Contracting Agency in the Nordic countries as well as through the author’s experience in the field. The above mentioned building categories are compared, the management structure in the five different countries studied and then the conclusion of the comparison is presented in a separate summary table.

An attempt is made to answer the research question by studying the research material and relevant reports and memorandums available in Iceland as well as in the other Nordic countries. The objective is to explore whether some typical
model of public real estate management exists in the Nordic countries. The conclusion from the research should indicate a suitable strategy or method for public real estate management in Iceland, whether it would be relatively unaltered from the present structure or a completely different one.

Limited research has been conducted on this topic matter in the last few decades and this thesis is intended to contribute to and broaden the knowledge in this subject area.

The thesis is divided into five chapters and the first chapter is an introduction to the topic matter, the second chapter is a literature review of the public real estate management strategies and methodology in the Nordic countries. The third chapter introduces the findings as well as a deliberation and recommendations for subsequent steps. The fourth chapter is a general conclusion.
2. Literature review

In this chapter the main research material and knowledge available in the Nordic countries concerning the topic is outlined as well as a study of the legal framework these countries have established regarding the construction, ownership and management of public real estate. Furthermore, a short comparison is made to the state of affairs in Britain. Emphasis is on the management of public real estate but in some cases municipal real estate will enter the comparison as the division between the two is vague in some of the respective countries. Regarding the Nordic countries there is a sub-chapter for each country where the development in the last one or two decades is outlined. However, the development in Iceland is traced back to the year 1965. This thesis is intended to contribute to research in this subject area as limited research has been conducted in Iceland in the last few decades with regard to this topic matter.

Information was gathered from written sources and in consultation meetings in the years 2000 to 2009 of the directors of the sister agencies of the Government Construction Contracting Agency in the other Nordic countries. These are annual meetings where the directors from the Nordic countries exchange views and information regarding the structure and strategy of public real estate management in their countries. (NKS, 1994) (NKS - Nordisk Kontakt om Statsbygninger, 2000 -2009).

This chapter examines performance management or New Public Management in the public sector and the Chain of Command in relation to the topic matter, with special emphasis on the connection between authority and responsibility.

The author will compare the different management methods and strategies used in the public real estate sector in the Nordic countries, with the aim of identifying major similarities and differences. How the methods and strategies in each of the five countries have evolved during the last decade is also examined.
To simplify the comparison between countries and obtain a broad perspective, the buildings are grouped into the following nine categories:

1. Office buildings
2. Defense / military facilities
3. University facilities
4. Hospitals
5. Prison facilities
6. Facilities abroad (foreign service)
7. Cultural buildings (listed buildings and museums)
8. Premises of Heads of State
9. Court houses and police stations
2.1 New Public Management

Towards the end of the 20\textsuperscript{th} century and in the first decade of the 21\textsuperscript{st} century international organizations like the OECD developed a new approach to managing the public sector called \textit{New Public Management}, NPM, also called performance management. This approach was the result of a search of ways to increase productivity and efficiency in the public sector and the basic idea was to create economic incentives and replace the administrative rules with economic ones (OECD, 2005).

The ideas transferred from the business sector are basically as follows:

- Autonomous management (with freedom to make decisions) and performance rewarding systems
- Public service providers organized as autonomous companies creating economic results
- Increased competition and outsourcing
- Political governance by contracts
- Change from an administrative to a business organization identity

The arguments for the NPM approach were that competition among service providers in the public sector would be the best guarantee for citizens to be offered the best price and quality. Furthermore, contractual relations between buyer and seller would give clarity, overview and opportunity for the authorities to verify the quality and price of public service. Payments for public service would ensure responsibility in the consumption and dampen tendencies of overconsumption, salaries and rewards to employees in relation to their performance would help ensure motivation and high productivity. A system was established where free consumer choice would give a more diverse supply of services. The main objectives of NPM relating to the administration of public real estate have been transparency of cost of facilities used by organizations and portfolios by annualizing investment expenses, efficiency in the use and provision of space by new incentives in regard to providing and using space, budget savings by outsourcing and selling of state property as well as the introduction of the concept of risk analysis (Røvik, 2007).

The Icelandic government participated in this international trend and the Ministry of Finance initiated in 1993 a campaign with the slogan \textit{New Public Management}
(Fjármálaráðuneytið, 1993) and such a policy was approved by the government two years later. The drive and the new policy were based on the same principles as OECD had presented and involved performance management, frame contracts, privatization and increased administrative power assigned to directors in the public administration. The year after, 1996, the government formally issued this new policy on public management. Public real estate management was addressed in the policy and emphasis laid on maintenance issues and market based rental systems of state owned properties or as is stated in article 5.2 (Fjármálaráðuneytið, 1996):

It is imperative that public organizations pay market based rent for their facilities.

This policy was implemented in steps over the next few years and in 2004 the Ministry of Finance published a handbook to guide the public personnel through the process (Fjármálaráðuneytið, 2004). The above objective in regard to market based rent has however still not been implemented at this time as is further discussed in chapter 3.5.
2.2 Chain of Command

The concept „chain of command“ is used to describe an organizational structure in which authority passes down from the top and persons in the chain are directly responsible to their superiors. Individuals are responsible to their superiors if they have a duty to obey their orders and if the superiors have the power to reward or punish them accordingly. Any deviation from this clear communication channel and two superiors having authority to govern the same individual undermines and threatens power, discipline and stability in the organizational structure (Fayol, H., 1997).

The Icelandic public administration is based on ministerial administration which can in simple terms be described as a hierarchy\(^1\) where the individual ministers are at the top of the pyramid (Gunnar Helgi Kristinsson, 1994). Ministerial administration is rooted in autocracy and is characterized by it as the emphasis is on hierarchy, power of governing and duty of obedience, however, with the advent of parliamentarianism it can be claimed that ministerial administration has been democratized. The administrative, authoritative and managerial capacity of the ministers entails that they are the highest ranking officials in the ministry and have the power of governing other employees. All decisions in the ministry are made on behalf of the minister and the employees themselves do not have independent administrative authority (Gunnar G. Schram, 1997).

The governing power of the minister over the ministry and organizations under it is extensive and is limited only by administrative law, hierarchy and the pragmatic approach to conventional division of labor. This capacity of the minister is thought to entail the three following key elements:

- The right to demand information
- The right to govern
- The right to amend decisions

No general legislation applies to the public administration structure as a whole, therefore the administrative position of individual public organizations is subject to the general principles of ministerial administration unless legislation regarding

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\(^1\) Hierarchy in this context entails that employees at a certain level in the pyramid have a duty of obedience towards those located one step above them in the pyramid.
individual public organizations prescribes otherwise (Haukur Ingibergsson, Guðríður Þorsteinsdóttir, Margrét Hauksdóttir, Valur Árnason, 2000).

In its purest form representative government and ministerial administration is based on the ideology of the Chain of Command where power is transferred from the voters to the elected representatives. From there the power is transferred to the Prime Minister who again hands parts of it over to the respective ministers who again pass a part of it over to public officials. This is illustrated further in Illustration 2.1 (Strøm, K., 2000)

**Illustration 2-1 - The Chain of Command in a system of Parliamentarianism**

In recent years this issue regarding the Chain of Command has been a cause of debate within the Icelandic public administration, especially following the introduction of the New Public Management approach. In the year 2000 a committee was appointed by the Minister of Finance to examine the existing law on responsibility, authority and administrative power assigned to directors in the Icelandic public administration, comment on possible shortcomings and present proposals of necessary adjustments. In its report the committee concludes that there is such a discrepancy between the different laws covering this issue that minor changes were not recommendable. Instead the committee proposed that a holistic system for the organization of the public administration should be implemented where, among other issues, the responsibility, authority and administrative power of the directors would be addressed (Haukur Ingibergsson, Guðríður Þorsteinsdóttir, Margrét Hauksdóttir og Valur Árnason, 2000).

At this time such a revision has not been carried out and as a result the Chain of Command is in many cases relatively vague for directors of public organizations.
2.3 Methods and strategies in Iceland

2.3.1 Types of government agencies

A general definition of a government agency is not to be found in any legislation. In the 4th paragraph of Act no. 97/1974 on supervision regarding recruitment of government employees and housing facilities of government agencies, there was a provision that stated that no new government agency must be established unless by legislation but this act was repealed in 1996. In most cases it is stated in sectorial law that an entity is a government agency but in some instances there are no provisions in law regarding a government agency even though the agency concerned has considerable operations. In a report issued by the Ministry of Finance in the year 2000 the following is proposed as a definition of a government agency:

“A government agency is any entity, independent of form, that is defined as a government agency or a public organization by law or is controlled by the state by half or by majority ownership and is a separate governing entity from other public activity“.

The report proposes to group government agencies into four categories: ministerial agencies, special agencies, independent agencies and regulatory committees. Following is a short description of each category:

A ministerial agency is an administrative part of a ministry and therefore the decisions made by the agency can not be appealed to the ministry. The minister appoints the director and the ministry has full and unlimited governing powers concerning all aspects of the operation. The formal independence of such an agency is therefore limited even though the ministry can grant them more independence. A ministerial agency does not have a board of directors, as an external entity can not be a part of decisions made on behalf of a minister.

A special agency is a limited, explicit administrative, project and management oriented entity that carries out specific projects assigned by law and makes decisions in its own name. A minister appoints the director and as the agency is a part of the ministerial administration the minister has complete and formal governing power over it. Direct intervention is though more limited than in the
case of a ministerial agency. The purpose with a special agency is to prevent the ministry from having to intervene in project handling or having to provide service.

An *independent agency* is an independent administrative entity and is always founded through legislation. The independence of such agencies is assured as the minister can not exert administrative or supervisory power on them. Thus, the minister can not give them binding instructions on administrative execution except in cases where the minister has special legal authority. Even though the minister does not have formal governing power over an independent agency the minister can influence the agency indirectly, e.g. by appointing a board of directors, funding, through regulations and through service contracts.

A *regulatory committee* is a multi-member administrative body, usually formed to undertake projects that are unsuitable within the traditional ministerial administration, for example specialized arbitration committees. A regulatory committee is therefore independent and not subject to ministerial governing power (Haukur Ingibergsson, Guðríður Þorsteinsdóttir, Margrét Hauksdóttir og Valur Árnason, 2000).

### 2.3.2 The Government Construction Contracting Agency

**The basis of the present structure**

The root of the present structure can be traced back to the year 1965 when Magnus Jonsson, Minister of Finance appointed a committee of seven members, chaired by Jon Sigurdsson, who was the Permanent Secretary in the Ministry of Finance, to explore ways to improve utilization of funds for public construction projects. The committee delivered a detailed report in April 1966 formulating proposals for a comprehensive revision of the management of public construction projects. The committee came to the conclusion that one of the main reasons for costly public construction projects was inadequate technical and financial preparation. Furthermore, the committee concluded that tendering was the most efficient and suitable procurement method for public construction projects and proposed that all construction projects were prepared, submitted for tender and supervised by one and the same agency (Jón Sigurðsson, Björgvin Guðmundsson, Jóhannes Pálsson, and Þorsteinn Jónsson, 1970).
Based on this report, a Bill regarding the structure of public construction projects was prepared and submitted in the legislative body Althing in spring 1967. The Bill was not passed but submitted again in 1968 considerably revised through comments supplied by various relevant parties. Many interesting comments and advice which needed extensive research made it impossible to pass the Bill in Althing at this time but the Bill was still again submitted in 1969, revised in accordance with the above mentioned comments. The Bill did not entail any fundamental changes of the power of the legislative body Althing concerning public construction projects and now as before the legislative body initiates all public construction projects by approving preparatory appropriation (Alþingi, Frumvæp til laga um skipan opinberra framkvæmda, 1969).

**The initial legal frame**

The Bill was passed on May 12, 1970 and became the Act regarding the structure of public construction projects. This Act, for the first time, proclaimed the obligation of tendering for public construction projects and set work procedure guidelines for procurement. As a result a special department of construction and contracting (FIR) was formed within the State Procurement Agency (IR), to manage and supervise public construction projects. The preparation stage of the projects continued to be handled by the relevant ministries and their government agencies and not with the new department. The Act states that at the completion of each project a close-off report should be prepared to summarize the final outcome of the project compared to the estimate. The Icelandic National Auditing Office formulates further procedures concerning the arrangement of the close-off report and writes it (Alþingi, Lög um skipan opinberra framkvæmda, nr. 63/1970, 1970).

The legislation seems to have withstood the test of time quite well as it was not until fourteen years later, in 1984, that a minor amendment was made to underline the obligation of tendering for projects. The amendment was initiated as some government agencies, which were authorized according to law to supervise certain
specified categories of public construction projects within their field, did not recognize that it entailed an obligation of invitation to tender. These agencies were The Icelandic Road Administration, The Post and Telecom Administration, The Icelandic Civil Aviation Administration and The State Electric Power Works (Ásgeir Jóhannesson, 1997). One sentence was added to the 3rd paragraph of article 21: „As a rule projects should be executed on the basis of a submitted tender in accordance with paragraph 13 of this law“ (Alþingi, Lög nr. 32/1984 um breytingu á lögum nr. 63/1970, 1984).

The department of construction and contracting (FIR) within the State Procurement Agency (IR)

Despite broad agreement regarding the Act, opinions were divided on the administrative position of the department of construction and contracting and some defined it as an organization covered by the permanent section (A-Section) of the State Budget despite being a department within the State Procurement Agency (IR). This dispute resulted e.g. in the Finance Minister, Albert Gudmundsson, appointing in 1984 a committee chaired by Magnus Petursson to review the structure of the State Procurement Agency on the one hand and the department of construction and contracting on the other and propose improvements for the operation of both. This committee reviewed the complete legal framework for public construction projects, especially Act no. 63/1970 regarding public construction projects. The committee delivered an opinion in February 1985 on the operation of the State Procurement Agency and in July on the operation of the department of construction and contracting. The conclusion was basically that even though considerable changes had occurred in the field of design, supervision and knowledge of construction projects in the 15 years since the law was enacted, the legal framework for public construction projects was, on the whole, still sufficient. However, preparatory work for public construction projects should be increased and independent parties should, to a greater extent, be brought in for the supervision part of the construction projects. Members of the committee were unanimous in their opinion that the Minister of Finance and the representative of the Althing Budget Committee needed to have extensive understanding of and be actively involved in public construction projects. The committee formulated two alternatives to modify the operation of FIR which both
aimed at moving the management of public construction projects to the state finance authorities which would evaluate the feasibility of projects and prioritize them. The first option entailed changes in the operation without amending the legal framework but the latter proposed amendment of law. The committee was not unanimous in which alternative was more feasible to adopt. The report points out that in the past it had sometimes proved difficult for ministries and customers to get satisfactory information regarding the financial status of construction projects. That fact is one of the reasons that both options presumed the segregation of FIR and IR (Magnús Pétursson, Finnur Jónsson, Friðrik Friðriksson, Ingimar Haukur Ingimarsson, Othar Órn Petersen, 1986).

In the report on audits of the 1987 central government accounts, the Icelandic National Audit Office points out that the new law regarding the State Procurement Agency, the Act regarding public procurement no. 52/1987, contains no reference to the intervention of the agency in the affairs of the department of construction and contracting and thus FIR should fully and totally undertake the payments and the keeping of financial accounts for public construction projects (Ríkisendurskoðun, 1988).

In 1990 the Minister of Finance, Olafur Ragnar Grimsson, assigned the Board of public procurement to review the role and future projects of the department of construction and contracting (FIR) in the State Procurement Agency and the structure of procurement for public projects in Iceland. The board submitted proposals in March 1991 and concluded that Act no. 63/1970 regarding the structure of public construction projects provided the appropriate framework. According to the Board of public procurement no amendment of law was necessary but a more targeted approach to the enforcement of the law where individual public construction projects would be viewed from beginning to end with a more holistic approach (Þórhallur Arason, Hilmar Ingólfsson, Logi Kristjánsson, 1991).

The Bureau of Economics and Statistics published a report in April 1992 on the role and framework of FIR where it is stated that there is disagreement in being an establishment of authority with obligatory projects as well as an organization that
provides service and acquires projects on the grounds of good service at competitive prices. The authority FIR has could undermine the will of the agency and individual employees to provide good services. The report suggests that FIR is changed into a comprehensive service agency in the field of public construction and maintenance projects and the close-off reports, now published by The Icelandic National Audit Office, transferred over to FIR. Furthermore, it is recommended that they handle technical standards, policy development as well as gathering and communicating information. The difficulty created by the ambiguity of the interrelation between FIR and IR is dealt with in the report and suggest issuing a regulation to, among other things, underline the independence of FIR (Hagsýsla ríkisins, 1992). Such a regulation was never issued though.

The State Trading Center and the Construction Contracting Agency
With reference to the recommendations in the above mentioned report, the Ministry of Finance decided at the end of the year 1993 to increase the independence of the department of construction and contracting and change the name to the Construction Contracting Agency (Framkvæmdasyslan). The Board of public procurement decided at the same time to change the name of the State Procurement Agency (Innkaupstofnun ríkisins) to the State Trading Center (Ríkiskaup) (Ásgeir Jóhannesson, 1997). With these decisions the much discussed segregation became a reality and the position of the director of the department of construction and contracting evolved into being the director of the Construction Contracting Agency. Still, the legislation was not reviewed as a result of this but was amended in accordance with legislation in the European Economic Space (Alþingi, Lög nr. 55/1993 um breytingu á lögum nr. 63/1970, 1993).

In a regulation regarding public procurement from June 1996 the name State Trading Center (Ríkiskaup) is reinforced and in paragraph 6 it says: „The state shall operate a public procurement agency under the name of the State Trading Center (Ríkiskaup)“ (Fjármálaráðuneytið, Reglugerð um innkaup ríkisins, 1996).
Review in the year 1995

In 1995 the Minister of Finance, Fridrik Sophusson, appointed a committee of seven public officials to propose the optimal way of managing and maintaining public real estate. The committee was, among other things, to examine the state of affairs and recommend improvements. In a report issued that same year it is specified that the proposals take into consideration the policy of the government of David Oddsson regarding New Public Management. The report summary states, e.g., that there is lack of coordination in public real estate management. In the instances where specialized organizations manage real estate, long term maintenance frames are prepared but such plans seem to be the exception in other instances. The condition of public real estate in cases where the agencies pay rent intended to pay the cost of operating and maintaining the facilities, the condition of the property is on the whole good but it is lacking to a considerable degree in cases where the maintenance cost is relied upon in appropriation from the State Budget. The committee proposes that e.g.:

- all public organizations pay rent based on the cost of maintenance, insurance and taxes. Furthermore, the objective is annualizing investment expenses in real estate.
- public real estate management entities should be few but capable. The long term goal is to concentrate all public real estate management in one administrative entity, the Government Real Estate. Real estate management will increasingly be submitted for tender and private organizations designated to own and manage real estate that the government needs for its operations.

One of the duties of the committee was to examine how public real estate was managed in the neighboring countries. The conclusion from that observation is presented in chapters 2.4 – 2.7 (Skarphéðinn Berg Steinarsson, Árni Hauksson, Dagný Leifsdóttir, Baldur Ólafsson, Björn Arnar Magnússon, Gylfi Ásthjartsson, Hermann Jóhannesson, Steindór Guðmundsson, 1995).

Review in the year 2001

It can be maintained that the proposals of the committee were adhered to in part by increasingly moving the management of public real estate to the Government Real Estate as discussed in the subchapter on the agency. Still, six years passed
until the Minister of Finance, Geir H. Haarde, appointed a committee of six members in January 2001 „to examine the management and structure of public construction projects and clarify the scope of responsibility of those involved, with the objective of making public construction projects both cost-effective and efficient“. The duties of the committee were mainly as follows: (Þórhallur Arason, Björn Friðfinnsson, Óskar Valdimarsson, Skarphéðinnn Berg Steinarsson, Viðar Ólafsson, Örlygur Geirsson, 2001)

- Study the managing and structure of public construction projects, according to Act no. 63/1970 regarding the structure of public construction projects
- Review work processes and channels of communication defined in law and are divided into the feasibility study, planning, construction and the close-off report.
- Review the responsibility, division of labor and the scope of authority of those associated with public construction projects
- Examine whether some elements regarding the implementation of the law can be strengthened either by amending the legislation or regulations.

The committee met in many sessions and the final report was drafted but the committee never concluded the work. The reason may be that in May of that year a Bill was presented in the legislative body regarding public procurement. In the bill Icelandic legislation is adapted to the regulations on public procurement in the European Economic Space and a general structure of procurement grounded in one broad body of law. However, in Act no. 63/1970 regarding public construction projects there were several provisions concerning general arrangements for procurement and therefore amendments of the legislation were inevitable. The Bill was drafted in haste as it can be said to be an accompanying Bill to the Act on public procurement. The conclusion was that there were only two amendments made to the Act from 1970, the first resulted from the amendments on the Act regarding public procurement and the second to make provisions for the role and operation of the Government Construction Contracting Agency. (Alþingi, Meirihluti efnahags- og viðskiptanefnda, 2001). In the Economy and trade committee the minority delivered an opinion criticizing the haste in the passing of the bill and specifically stated that they did not get an opportunity to discuss the views of the National Icelandic Audit Office regarding
fundamental reform of the management structure of public construction projects (Alþingi, Minnihluti efnahags- og viðskiptanefndar, 2001). The goal of the Finance Ministry was to delay other possible amendments of the Act until the committee had finished the work and delivered an opinion. However, as said before the committee never concluded the work but still it can be claimed that many of the proposals were taken into consideration in the regulation issued in September 2001.

The Government Construction Contracting Agency established in legislation

In May 2001, eight years after being segregated from the State Procurement Agency (named the Construction Contracting Agency) the Government Construction Contracting Agency was formally established as a government agency through legislation. The 19th paragraph of the law states (Alþingi, Lög um skipan opinberra framlænda, nr. 84/2001, 2001):

The state will operate an agency, the Government Construction Contracting Agency to manage public construction projects unless otherwise specified in this Act. The agency provides consultancy services to ministries and public organizations regarding technical matters and the preparation of construction projects. The Government Construction Contracting Agency is a government agency responsible to the Ministry of Finance.

As stated above, a comprehensive review of the framework of public procurement was carried out simultaneously, as per Act no. 94/2001 and the laws came into effect on June 15th 2001.

Regulation issued

In September of the same year, in the wake of the Act regarding the structure of public construction projects in 2001, a regulation was issued to elaborate further on the implementation of the law (Fjármálaráðuneytið, Reglugerð um skipulag opinberra framlænda, nr. 715/2001, 2001) The Act and the regulation issued in 2001 regarding the structure of public construction projects are still valid at this time but the Act regarding public procurement was amended in 2007 (Alþingi, Lög um opinber innkaup, 2007)
Chapter III of the regulation deals with role and responsibility regarding public construction projects. Paragraph 10 states that:

„The relevant ministry handles the feasibility study and general planning in accordance with applicable rules and regulations but can assign work concerning it to the relevant organization, special advisory committees, a municipality or other potential owners. Still, the relevant ministry is responsible for the feasibility study, planning and their submission. The relevant ministry or the entities the ministry assigns the planning phase shall consult the Government Construction Contracting Agency on the arrangement of general planning“.

Furthermore, paragraph 11 states:

„On request the Government Construction Contracting Agency provides consultation on feasibility studies and general planning of public construction projects. The agency advises the Ministry of Finance on technical matters in the planning phase. The role of the Government Construction Contracting Agency in the planning process for relevant ministries involves standardizing forms and preparing negotiations with consultants and others involved in the planning process.

The Government Construction Contracting Agency manages and is responsible for the execution of the construction project. The agency prepares invitations for tender, compares bids, advises on the choice of contractors and conducts negotiations with the contractor selected for the project. The agency is responsible for the execution of the construction project and that it is carried out in accordance with the contract drawn up with the contractor and the project plan. The Government Construction Contracting Agency is responsible for the supervision of construction projects during the construction period and draws up and signs the contracts in case the agency consigns the supervision to another entity.

At the onset of a public construction project a written contract between the relevant ministry and the Government Construction Contracting Agency detailing the arrangement, communication channels and duties of the contracting parties must be drawn up. The Government Construction Contracting Agency shall inform the relevant ministry of the progress and financial status of the project regularly. In case of anticipated deviation from cost estimate or progress that would result in planning revision the agency is obliged to inform the relevant ministry about it immediately and formally“.
The administrative position of the Government Construction Contracting Agency

As stated above, the Government Construction Contracting Agency (GCCA) was formally established through the Act regarding public construction projects in May 2001. That same year the director of the GCCA assigned Logos – Legal Services to write a report on the legal position of the agency, in view of outlining issues of controversy regarding the administrative position of the agency and legal role. The report deals with the issue of whether the agency can be defined as an independent agency in the legal definition of the term and reference made to the use of the concept in the memorandum accompanying the Bill that later became Act no. 84/2001 in which it is stated that the Government Construction Contracting Agency has actually operated as an independent agency (italicized by author) with a role in public construction projects.

The authors of the report come to the conclusion that even though the intention with the wording was that the GCCA was considered an independent agency, it is a subordinate administrative entity responsible to the Minister of Finance and the final paragraph of article 19 in the Act regarding the structure of public projects confirms this beyond any doubt. It is more probable that those who wrote the comments accompanying the Bill had been referring to the fact that the GCCA had for some years operated independent of the State Procurement Agency, in which it had been a department, and thus operated independently from that specific entity. With reference to the discussion concerning different types of government agencies in chapter 2.3.1 the Government Construction Contracting Agency is considered a special agency, but towards them the direct intervention of a minister is more limited than towards ministerial agencies.

The report states that the scope of the principal activities and duties of each minister are prescribed in law and presidential decree, as per paragraph 15 of the constitution. As a result, other ministers have no authority to instruct the Government Construction Contracting Agency or apply other administrative powers and the same applies to building committees that have been delegated the power of a minister. The GCCA should „disregard such instructions as they are meaningless and should be ignored as such because of the obvious lack of
authority of the relevant minister“. Furthermore, the report claims that it is not clear whether all construction projects financed by the state are subject to the law or what criteria should be applied when evaluating whether a construction project should be legally bound by the Act or not.

In the case of Private Public Partnership (PPP) contracts the report mentions comments regarding the 1st paragraph of the Bill where it says among other things: „These contracts involve considerable obligations on behalf of the state and therefore it is proposed that they be subject to the work process defined in law“. The authors of the report maintain that here the legislator has determined without a doubt that PPP construction projects are subject to the law and therefore the Government Construction Contracting Agency is responsible for the elements in PPP construction projects that the agency is entrusted with according to the legislation. This has, however, not been the case and the Ministry of Finance has assigned the State Trading Center to handle procurement for PPP construction projects on the grounds that it involves the purchase of service.

It is the general opinion of the authors of the report that if the Government Construction Contracting agency becomes aware of a project that, according to the law, should have been referred to them, they have an obligation to make the relevant entity aware of the oversight. If, however, the information is disregarded the agency is required to notify the Ministry of Finance of this shortcoming and, depending on the circumstances, the relevant ministry. Still, it cannot be concluded that the GCCA should inspect whether construction projects that the law applies to are pending or being carried out. However, the GCCA has a general duty to advise ministries and public organizations in this field. It is not considered obligatory for the agency to take the initiative to give such advice but if requested by the appropriate entities the GCCA has an obligation to provide consultation.

The authority of the Government Construction Contracting Agency to assign the power they have and is bound in law is also discussed in the report and deduced that the agency should exercise discreetness. This also applies in cases where the
authority is assigned to another administrative power, for instance a construction committee that is established for a specific project, as it is the will of the legislative body that public construction projects should be managed by one entity (Othar Örn Petersen, Guðmundur J. Oddsson og Ólafur Jóhannes Einarsson, 2001).

2.3.3 Other Construction Agencies

In the law regarding public construction projects it is stated in paragraph 17 concerning the management of public construction projects that:

„Public construction projects are under the auspices of the Minister of Finance that implements the Act. ...the Ministry of Finance is authorized to delegate the management of specified categories of public construction projects to individual public organizations as these organizations have the capacity to handle the projects“.

As discussed in chapter 2.3.2 this authorization to assign certain specified categories of public projects to individual public organizations has been provided for in law since 1970 and the Ministry of Finance has always taken advantage of it. In the beginning the agencies in question were five, but the Post and Telecom Administration is no longer on the list and the remaining four organizations are:

- **The Icelandic Road Administration**
  Responsible for the construction and operation of roads and bridges

- **Icelandic Maritime Administration**
  Responsible for the construction and operation of harbor structures

- **ISAVIA**
  Responsible for the construction and operation of airports

- **The State Electric Power Works**
  Responsible for the construction and operation of power related structures

The above list includes two government agencies and two state owned corporations. These entities will not be referred to further as they are not concerned with the types of public construction projects this thesis deals with.
2.3.4 Government Real Estate

The Government Real Estate (GRE) is an agency under the Ministry of Finance. The role of the agency is to handle maintenance, renovation and modification of the real estate the agency manages and lease it to ministries and public organizations. The existence of the Government Real Estate can be traced back to the year 1980 but with a letter dated on February 7th of that year, the Minister of Finance appointed a specific board to Government Buildings (Húseignir ríkissjóðs) to manage matters concerning state owned buildings. The members of this first board were Gunnlaugur Claessen, department head in the Ministry of Finance, Bjorn Hermannsson, director of the Directorate of Customs and Hedinn Eyjolfsson, department head in the State Budget and Economics Administration (Fjármálaráðherra, 1980).

Immediately the following year the board was also assigned matters concerning farm estates and building sites and the name was changed into Government Real Estate as per a letter from the Minister of Finance from July 1981: „Here the reference is made to public real estate and referred to „Government Real Estate“ as a separate agency belonging to the B-Section of the State Budget and listed there as one of the agencies responsible to the Ministry of Finance“. At this time there were seven buildings in Reykjavik managed by the agency as well as some property out in the country (Fjármálaráðherra, 1981). The agency has operated under this name since.

The lease amount the Government Real Estate collects finances maintenance, renovation, tax and insurance as well as their own operation cost (her referred to as operation based rent). Therefore, the agency operates partly according to the same principles as a private real estate management company but with important exceptions though: (Stjórnhættir, 2006):

- The real estate startup investment cost is financed through appropriation from the State Budget but not by borrowing and equity.
- As a result the lease does not cover all cost in acquiring and operating the premises. The main discrepancy lies in the fact that the lease is not intended to cover capital costs or capital investment expenses.
The Ministry of Finance is the formal owner and makes decisions regarding purchasing or selling real estate according to authorization in the State Budget.

It is the decision of the relevant ministries in co-operation with the Ministry of Finance whether and what real estate is managed by Government Real Estate but in past years the management and operation of various property owned by the state has been assigned to the Government Real Estate from public organizations and ministries. The main categories are illustrated in the above Table 2.1.

**Table 2-1 - Categories of real estate at The Government Real Estate**

<table>
<thead>
<tr>
<th>Ministry</th>
<th>Category of real estate</th>
<th>Year of contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry for the Environment</td>
<td>Icelandic Institute of Natural History</td>
<td>1981</td>
</tr>
<tr>
<td></td>
<td>Icelandic Meteorological Office</td>
<td>1990</td>
</tr>
<tr>
<td>Ministry of Health</td>
<td>Ministry Offices</td>
<td>1981</td>
</tr>
<tr>
<td></td>
<td>Health Establishments</td>
<td>2009-2010</td>
</tr>
<tr>
<td></td>
<td>Official Residences</td>
<td>2009-2010</td>
</tr>
<tr>
<td>Ministry of Transportation</td>
<td>The Icelandic Road Administration</td>
<td>1990</td>
</tr>
<tr>
<td>Ministry of Social Affairs and Social Security</td>
<td>Ministry Offices</td>
<td>1990</td>
</tr>
<tr>
<td></td>
<td>Treatment Facilities</td>
<td>1990</td>
</tr>
<tr>
<td></td>
<td>Diagnostic Centers</td>
<td>1990</td>
</tr>
<tr>
<td>Ministry for Foreign Affairs</td>
<td>Ministry Offices</td>
<td>1994</td>
</tr>
<tr>
<td>Ministry of Education, Science and Culture</td>
<td>School of Education</td>
<td>1981</td>
</tr>
<tr>
<td></td>
<td>Secondary Schools</td>
<td>2001-2003</td>
</tr>
<tr>
<td></td>
<td>Art Galleries and Museums</td>
<td>2005</td>
</tr>
<tr>
<td>Ministry of Justice and Human Rights</td>
<td>District Court Facilities</td>
<td>1990-2000</td>
</tr>
<tr>
<td></td>
<td>District Commissioner Facilities</td>
<td>1990-2000</td>
</tr>
<tr>
<td></td>
<td>Police Stations</td>
<td>1990-2000</td>
</tr>
<tr>
<td></td>
<td>Official Residences</td>
<td>1990-2000</td>
</tr>
<tr>
<td>Ministry of Finance</td>
<td>The Icelandic National Audit Office</td>
<td>1981</td>
</tr>
<tr>
<td></td>
<td>The Public Sector Labor Market Institute</td>
<td>1981</td>
</tr>
<tr>
<td></td>
<td>The State Conciliator</td>
<td>1981</td>
</tr>
<tr>
<td></td>
<td>Revenue Offices</td>
<td>1995</td>
</tr>
<tr>
<td></td>
<td>Other Facilities</td>
<td>1995</td>
</tr>
</tbody>
</table>
The current arrangement of the management of public real estate is a combination of methods as there are various approaches available for acquiring housing facilities for ministries and their organizations. The main ones are as follows:

- The real estate is owned by the state and managed by the Government Real Estate which leases it to a public organization
- The real estate is owned by the state and managed by the relevant organization or the ministry.
- The real estate is privately owned and the Government Real Estate subleases the property to a public organization (which in this case pays all costs)
- The real estate is privately owned and leased directly to a public organization (which pays all costs)
- The property is privately owned but a long-term lease has been signed between the organization and the lessor. In some cases the Government Real Estate is the lessee on behalf of the state (the agency pays all costs)

In the report *Cost Based Rent – Transparency and Flexibility in matters of housing facilities for public organizations* commissioned by the Government Real Estate in 2006 and sent to the Ministry of Finance for introduction, it is e.g. proposed that public organizations pay *cost based rent*, i.e. an amount that reflects fully the cost of the state involved in owning and operating real estate. The introduction of cost based rent would increase transparency, actual costs would be more visible, it would increase flexibility, evoke financial incentives and define more clearly where the responsibility in matters of housing lies. It is claimed in the report that the Icelandic state should use similar methods in managing its real estate as are successfully used by private companies, municipalities in this country and abroad, and in public management in our neighboring countries.

The report proposes coordination in matters of housing, independent of whether it involves the construction, purchase or lease of real estate and that the management and ownership of public real estate is under the supervision of the Government Real Estate. Thus it is proposed that the Government Real Estate becomes a comprehensive real estate agency which can offer all the management and services equivalent entities are currently offering. The role of the agency would be expanded and would cover leasing, managing, maintaining, constructing, sub-leasing, purchasing and selling real estate. It is considered necessary to review
and clarify the role of the key organizations concerned with public real estate and in that connection public organizations, relevant ministries, the Ministry of Finance, the Government Construction Contracting Agency, the Government Real Estate and The State Trading Centre are mentioned (Stjórnhættir, 2006).

**The administrative position of the Government Real Estate**

Despite the fact that the Government Real Estate has been operated as a government agency for thirty years the legal foundation is weak as no legislation regarding the agency has been enacted. In notice A 96/1969 regarding division of affairs between ministries, built on Act nr. 73/1969 regarding Icelandic Government Offices it is specified that the Ministry of Finance supervises public real estate affairs and in July 1991 the Ministry of Finance confirmed the current working procedures for the Government Real Estate (Fasteignir ríkissjóðs, 1997).

With reference to the discussion regarding types of state agencies in chapter 2.3.1 the Government Real Estate is regarded a ministerial agency but such an agency is an administrative part of the ministry concerned - in this case the Ministry of Finance, and the formal independence of the agency is limited. In the activity plan of Government Real Estate 2005-2009 the necessity of re-evaluating the role and position of the agency is approached and for instance there is a reference made to the development in real estate management in general. The activity plan states that proposals regarding the future of the agency will be made in co-operation with the Ministry of Finance as well as exploring whether the legal foundation of the agency needs to be strengthened (Fasteignir ríkissjóðs, 2004).

In the above mentioned report regarding cost based rent which the Government Real Estate introduced to the Ministry of Finance in 2006 it is claimed that if cost based rent is adopted in public real estate management the agency will evolve from being a technical professional entity towards being a market oriented service organization. Such a change would call for a review of the legal foundation of the operation, which is currently very weak. The main proposals in the report entail that the ownership of public real estate would be in the hands of the agency and
possibly other specialized real estate organizations and that the Government Real Estate will be strengthened by giving the agency a legal frame.

2.3.5 Construction committees

Through the years ministries and public organizations have, to a considerable degree, appointed construction committees to supervise government construction projects, either short-term (one particular building) or long-term to supervise in general the construction projects of certain organizations. The scope of authority and the role of such construction committees cannot be found in law. However, there is a precedent for their existence in law, e.g. in paragraph 2 of the second article of Act nr. 46/1998 regarding artistic decoration in public buildings and the Public Buildings Art Fund it is stated: „Regarding decisions concerning the construction projects this Act applies to, the architect of the building and the construction committee shall seek the professional advice on the artistic decoration from the board of the Public Buildings Art Fund“. By this quote and comments in the explanatory memorandum accompanying the Act it is clear that construction committees are known in this sector. However, the role of construction committees is viewed differently, both depending on who appoints them and also how the members themselves view their role. In a study prepared by PricewaterhouseCoopers commissioned by the Government Construction Contracting Agency regarding the environment of public construction projects in 2001 it is evident from interviews with the members of various different construction committees that the committees view their role in different ways. One committee considered it their role to make decisions regarding the design and construction work and to supervise the construction project. Another regarded it their role to approve proposals from GCCA and act as a pressure group, and still another construction committee considered it their role to make certain that information reached relevant parties at the right time. A construction committee for a project that was a joint ministerial and municipal project considered their role completed after the GCCA had taken over the project. All the committees agreed that the responsibility for individual elements was not clear after GCCA became involved in the project. One committee considered that they were entirely responsible for the project as a whole while yet another one considered that they
were only responsible for the relevant project to a very small extent (PricewaterhouseCoopers, 2001).

The following discussion concerning the power and administrative position of construction committees is based on a report prepared by Logos – Legal Services and commissioned by the Government Construction Contracting Agency in 2001.

It is called assigning competences when a competent authority assigns to another entity the projects they are obliged to carry out according to law. In administrative law a distinction is made between external and internal assignment of power. Internal assignment of competences is when a minister or a director of a government agency delegate their power to subordinates in the ministry/agency. Such assignments of responsibility are generally authorized on the basis of tradition and the nature of the affairs. External assignment of competences is when an administrative power assigns power to an outside entity, another administrative power or a private party. According to general administrative rules regarding assigning competences, external assignment of power is generally unlawful unless supported by clear authorization in law. This observation is presented here to support the following discussion regarding the authority of construction committees.

Construction committees are based on either an administrative decision or an administrative action so it is unequivocal that they belong to the category of so-called regulatory committees (see discussion on various types of government agencies in chapter 2.3.1) and they are obliged to follow the general rules of administrative law. Also, the general regulations on eligibility according to administrative regulations are applicable regarding members of construction committees. If a construction committee is solely made up of employees of the relevant ministry or agency it is considered an internal assignment of confidences and may be considered authorized as such. If the committee is, on the other hand, made up of individuals who are not the employees of the administrative power as is usually the case, it must be considered an external assignment of confidences. It is generally agreed upon that an administrative power is authorized to externally assign power in cases of obligatory projects according to the laws and regulations
regarding public projects. On the other hand, it must be considered that an administrative power is not authorized to assign power to construction committees in the field of private law. A construction committee is thus not authorized to decide on what bid should be accepted after an invitation to tender. However, it should be reaffirmed that an administrative power is authorized to consult a construction committee regarding choice of contractors based on the rules of administrative right to seek independent advice.

An administrative power is, despite having assigned power to a construction committee, still responsible for a project being carried out in accordance with the applicable law and regulations. In accordance to this the administrative power is obliged to make certain that the construction committee properly attends to its duties. Furthermore, it must be concluded that the construction committee is not authorized to assign the authority they have been granted from the administrative power, whether it is a third party or the committee chairperson (Othar Örn Petersen, Guðmundur J. Oddsson og Ólafur Jóhannes Einarsson, 2001).

Table 2-2 - List of public real estate authorities in Iceland

<table>
<thead>
<tr>
<th>Category of real estate</th>
<th>Authority in charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Office buildings</td>
<td>Various ministries (+ private sector)</td>
</tr>
<tr>
<td>2. Defense / Military facilities</td>
<td>Ministry of Finance (starts in 2010)</td>
</tr>
<tr>
<td>4. Hospitals</td>
<td>The Ministry of Health</td>
</tr>
<tr>
<td>5. Prison facilities</td>
<td>The Ministry of Justice and Human Rights</td>
</tr>
<tr>
<td>6. Facilities abroad (foreign service)</td>
<td>The Ministry for Foreign Affairs</td>
</tr>
<tr>
<td>8. Premises of Heads of State</td>
<td>The Office of The President of Iceland</td>
</tr>
<tr>
<td>9. Court houses and police stations</td>
<td>The Ministry of Justice and Human Rights</td>
</tr>
</tbody>
</table>

In all cases the real estate is owned by the state and the listed authority in charge is responsible for the management of the respective real estate. However, in many cases they have an agreement with the Government Real Estate regarding the management and pay the agency a fee – operation based rent – for that service.
2.4 Methods and strategies in Finland

Senate Properties

For more than 180 years, until 1995, most of the property of the Finnish state was managed by The National Board of Public Buildings (Rakennushallitus) and its predecessors. In 1995, the Board was dissolved and the state’s properties were distributed among 15 property management units. The largest of these units, The State Real Property Agency (Valtion kiinteistölaitos), was given responsibility for managing almost half of the assets of the property of the Finnish state. On January 1st 1999, the agency was transformed from being a governmental agency into being an unincorporated state-owned enterprise. On March 1st 2001 its name was changed to Senate Properties (Senaatti-kiiinteistör). The purpose with the name change was to improve the corporate image (Senate Properties, 2009).

The status of Senate Properties was defined in a general law concerning state enterprises in 2002 and the mission and structure of this enterprise were more specifically defined in a special law about the enterprise in 2003. Its status as a state enterprise closely resembles a limited liability company but the state carries an unlimited residual liability for its risk. The duties and responsibilities of the Board and the CEO were specified to be compatible with private enterprises. The mission of Senate Properties does not include any public authority duties. The main task is to provide space and related services to state organizations.

Being an unincorporated state enterprise means that Senate Properties finances its operations independently and it does not fall within government on-budget finances. The most significant decisions related to its operation, however, are taken in Parliament in connection with the government Budget, but otherwise the operations of Senate Properties are governed by general legislation on unincorporated State enterprises and by specific legal provisions on the organization itself. The Parliament and the Ministry of Finance set financial and operational targets for Senate Properties on an annual basis (Ministry of Finance, 2009).

The clients of Senate Properties include universities, government agencies, ministries, culture and research bodies, penal institutions (from 2001) and the
Defense Administration (from 2003 – a total of about 8,000 buildings). The business operations of Senate Properties are now divided into five business areas:

- Ministries and Culture (11%)
- Defense and Security (27%)
- Universities and Research (40%)
- Offices (16%)
- Development (6%)

In 2008 negotiations started between Senate Properties and the Ministry for Foreign Affairs regarding construction and management of the Ministry’s embassy buildings. No conclusion has been reached when this thesis is written. Senate Properties manages income producing buildings of cultural value in the sense that they are part of the rental system while the Board of Antiquities manages cultural buildings and monuments (like castles and ruins) that are financed directly by the state budget in addition to some entry fees. This division is far from being definite.

A significant change for Senate Properties was initiated in 2008, a reform of the financial and administrative status of universities that would also entail a change of ownership for university buildings. According to a committee’s proposal that was submitted in October 2008 the universities’ premises would be incorporated into three property corporations owned by the universities and the state. The universities’ holding in the property corporations would be 2/3 and that of the state (i.e. Senate Properties) 1/3. The Cabinet Economic Policy Committee set guidelines for further preparations on the basis of the proposal of the committee. The intention was to set up the companies no later than August 1st 2009 and the university premises corporations would start up fully at the same time on January 1st 2010 with the new-style universities operating on the basis of the new Universities’ Act. Parliament gave permission for the establishment of the property companies in the supplementary budget for 2008 (Senate Properties, 2009) (Helsinki School of Economics, 2009).

Another important change for Senate Properties was a decision made early in 2008 by The Cabinet Economic Policy Committee to launch a project to chart the applicability of the state-owned enterprise model to the internal market. The
Ministry of Finance set up a preparatory workgroup in 2009 with the mission to examine the status of Senate Properties as a state-owned enterprise. Although the task of the workgroup is not finished when this is written, estimated completion was by the end of 2009, it is considered likely that the enterprise will become an in-house entity with a maximum private sector income of 10 per cent. This change is based on an EU regulation.

**Other public real estate authorities**

Other authorities that manage state owned properties in Finland are:

The Ministry of Defense (Försvarsministeriet), The Rail Administration (Banförvaltningscentralen), The Road Administration (Vägverket), Grönsbevakningsväsendet, The Ministry of Education (Undervisningsministeriet), National Board of Antiquities (Museiverket), The Governing Body of Suomenlinna (Sveaborgs förvaltningsnämnd), The Forest Research Institute (Skogsforskningsinstitutet), The Maritime Administration (Sjöfarsverket), The Parliament (Riksdagen), Office of the President (Republikens presidents kansli), Prime Minister’s Office (Stadsrådets kansli) and Ministry of Foreign Affairs (Utenriksministeriet).

The vast majority of public hospitals in Finland are municipally owned. Smaller clinics are usually owned by a single municipality. Larger hospitals are co-owned by several municipalities. The co-ownership occurs through a joint authority named "healthcare district". There are 20 healthcare districts in Finland and each municipality must belong to one.

**Table 2-3 - List of public real estate authorities in Finland**

<table>
<thead>
<tr>
<th>Category of real estate</th>
<th>Authority in charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Office buildings</td>
<td>Senate Properties (+ private sector)</td>
</tr>
<tr>
<td>2. Defense / Military facilities</td>
<td>Senate Properties</td>
</tr>
<tr>
<td>3. University facilities</td>
<td>Senate Properties (new entity in 2010)</td>
</tr>
<tr>
<td>4. Hospitals</td>
<td>Municipalities / districts</td>
</tr>
<tr>
<td>5. Prison facilities</td>
<td>Senate Properties</td>
</tr>
<tr>
<td>6. Facilities abroad (foreign service)</td>
<td>Ministry of Foreign Affairs</td>
</tr>
<tr>
<td>7. Cultural buildings (listed + museums)</td>
<td>Senate Properties (+ Board of Antiquities)</td>
</tr>
<tr>
<td>8. Premises of Heads of State</td>
<td>Office of the President</td>
</tr>
<tr>
<td>9. Court houses and police stations</td>
<td>Senate Properties (+ private sector)</td>
</tr>
</tbody>
</table>
2.5 Methods and strategies in Sweden

In 1992 the central government completely reorganized the structure of its real estate management system. At this time the government owned almost all property used by government authorities, both special purpose buildings such as prisons or universities and general office buildings. The Central Building Authority (Byggnadsstyrelsen) was responsible for building and maintaining all government property and employed at that time ca 2000 people. There were three main reasons for changing this structure (Lind, H. and Lindquist, T., 2005):

1. Under the existing system new buildings did not cost the users anything. This led to a high demand for new facilities and put no pressure on the users to use their premises efficiently.
2. The government wanted to introduce a system of allocating a certain sum of money to each authority for all its expenses, including real estate cost.
3. The Central Building Authority had a monopoly position and it was difficult to know whether it was efficient in its real estate management. The government wanted to introduce some competition into this market.

The central government looked at three main alternatives in reorganizing the management system:

- **The first** alternative was to decentralize the ownership of the premises to the authorities using them. The authorities would then own the buildings they were using and be responsible for managing them, paying the cost out of the general funds allocated to them. This alternative was not chosen, primarily for the following reasons:
  - It was believed to lead to less efficient property management, since this would not be a core activity of the authority.
  - Cut-backs in general funding to the authority would lead to excessive reduction in its expenditure on real estate maintenance, leaving the buildings in poor condition in the long term.
  - A pressure could arise where the authorities, as owners of the property, would like to sell off property that had increased in value and in that way increase its resources.
• **The second** alternative was to sell most of the property to the private sector. The Swedish government decided against this strategy for special purpose buildings, with the argument that this strategy was too risky and would mean great loss of control. Most general office buildings, however, were put into a special company, Vasakronan AB, that the government planned to sell, as there were no strong arguments for owning that kind of property.

• **The third and the chosen solution** was that special purpose buildings were allocated to a number of government-controlled units, some of them in the form of joint-stock companies owned by the government, and some in the form of government authorities. Four such units were established:
  
  o Academic Buildings (*Akademiska Hus*) which owns buildings used by universities and other types of higher education (*Akademiska Hus*, 2009).
  o The National Property Board (*Statens Fastighetsverk, SFV*) which owns heritage buildings and buildings used by cultural institutions (museums and theatres) and the most important government quarters, including embassy buildings abroad (*Statens Fastighetsverk*, 2009).
  o Special Properties (*Specialfastigheter AB*) which owns prisons, military buildings and other similar institutions (*Specialfastigheter*, 2009)
  o The Fortifications Agency (*Fortifikationsverket*) which owns buildings and other real estate used by the armed forces (*Fortifikationsverket*, 2009).

Each of these units acts as a professional real estate company with its own economic target. A very important part of this reform was that ordinary government authorities were free to rent premises from any real estate firm and many of them have used this freedom for both special purpose and general purpose buildings. The authorities were, however, not allowed to own real estate. The main argument for choosing this structure was that in line with the tendency towards decentralization of the budget system, each authority would now be responsible for getting the premises it considered to be the most suitable, taking into account both quality and price, and the freedom given to them to choose their landlord would put a competitive pressure on the government owned real estate units.
The experience of using this system in Sweden is in general good. However, in the university sector a number of universities have been dissatisfied with their landlord Academic Buildings and are trying to find alternatives when they need new premises. In 2004 a pressure started building up towards the organization of SFV regarding facilities existing in their portfolio that created constant deficit. SFV highlighted this question in 2004, concerning mainly cultural heritage facilities and as a result received additional funding for those facilities for a number of years. In 2009 the Ministry of Finance set up a committee to examine the alternatives regarding the future organization of real estate management of all state owned real estate, both in agencies and limited companies. The committee is scheduled to complete its work in December 2010. What will be the result remains to be seen, but it is considered likely that The National Property Board will continue to be an agency and receive even more facilities, especially in the cultural heritage area.

Vasakronan is run just like a private company and is today the leading property company in Sweden and most of its tenants are private firms, but public office buildings are in general owned by other private companies or The National Property Board. The plan in 1992 was to sell the company as soon as possible, but that did not happen until 16 years later, in July 2008, and it is now owned equally by the First, Second, Third and Fourth Swedish National Pension Funds (Vasakronan, 2009).

The public hospitals in Sweden are owned and run by the regions. The local and regional governments are free to manage their real estate the way they want, but the general tendencies are the same at all three levels of the Swedish public sector.

In the category of court houses, The National Property Board manages only the high courts in Riddarholmen / Gamla Stan and in Jönköping because they are situated in national cultural heritage buildings, but in general such facilities are leased on the private market. Police stations are in general also leased on the private market with the exception that the great quarter Kroneberg in Stockholm is managed by Special Properties.
<table>
<thead>
<tr>
<th>Category of real estate</th>
<th>Authority in charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Office buildings</td>
<td>Private market + Vasakronan + SFV</td>
</tr>
<tr>
<td>2. Defense / Military facilities</td>
<td>The Fortifications Agency</td>
</tr>
<tr>
<td>3. University facilities</td>
<td>Academic Buildings</td>
</tr>
<tr>
<td>4. Hospitals</td>
<td>Municipalities / regions</td>
</tr>
<tr>
<td>5. Prison facilities</td>
<td>Special Properties</td>
</tr>
<tr>
<td>6. Facilities abroad (foreign service)</td>
<td>The National Property Board (SFV)</td>
</tr>
<tr>
<td>7. Cultural buildings (listed + museums)</td>
<td>The National Property Board (SFV)</td>
</tr>
<tr>
<td>8. Premises of Heads of State</td>
<td>The National Property Board (SFV)</td>
</tr>
<tr>
<td>9. Court houses and police stations</td>
<td>Private market + SFV + Special Properties</td>
</tr>
</tbody>
</table>
2.6 Methods and strategies in Norway

Public real estate management in Norway has a history of over 200 years. In this period extensive discussion on centralization versus decentralization has taken place and different solutions offered for both methods. In 1928 The State Building Inspectorate (Statens Bygningsinspektorat) was established to be responsible for the public real estate. The name changed to The State Architect (Riksarkitekten) in 1936. In 1960 The Government's Buildings and Property Directorate (Statens bygge og eiendomsdirektorat, SBED) was established to take on the responsibility of planning, construction and facility management of the public real estate in Norway. The establishment of SBED carved in stone the strategy of centralization, which is still holding, though several attempts have been made through the years to change it.

In 1993, based on results from a modernizing committee's report, The Public Construction and Property Management (Statsbygg) was established to design, construct and manage state property. It was an administrative body, responsible to the Ministry of Government Administration and Reform. Statsbygg also offers consultancy and assistance in civil engineering and technical matters to ministries and other governmental organizations. It cooperates with the public administration and advises on assessing property needs, planning and acquiring property. In 2000 Statsbygg was reorganized to minimize the agency's competition with the private market. A new entity (subsidiary), Entra Eiendom AS, was established (comparable to Vasakronan in Sweden) to take over from Statsbygg the property that was considered to be in the competitive market, i.e. office buildings. This amounted to 25% of Statsbygg's portfolio. (Statsbygg, 2002).

The plan was to sell Entra Eiendom AS to the private market as soon as practicable, but when this is written (9 years later) the company is still wholly owned by the Norwegian state and plans to sell it have been abolished. Today Entra Eiendom AS ranks among Norway's largest real estate companies and operates in direct market competition with privately owned property companies, but still with the public sector in Norway as its primary customer group (Entra Eiendom AS, 2009) (Elísabet H. Guðmundsdóttir, 2005).
In 2002 the Ministry of Labor and Government Administration launched the action plan: „Modernizing the public sector in Norway – Making it more efficient and user-oriented“. The vision of the right wing coalition government was to create a less complex public sector and make it more efficient through delegation and decentralization of authority and responsibility (Ministry of Labour and Government Administration, 2002).

A part of this program was to reorganize Statsbygg and make sure that it would not be both a constructor/owner of public real estate and at the same time offer consultancy and assistance in civil engineering and technical matters to ministries and other governmental organizations. Statsbygg published an extensive report on these matters where it was proposed that all its real estate should be transferred to a limited company owned by the state. Four relevant Ministries approved of this proposal but the Ministry of Finance did not approve since it would decrease the possibility of the Ministry’s control over public real estate development. Negotiations did not lead to an acceptable conclusion, so the drastic changes to the organization of Statsbygg were put on hold. A new minister took office in 2004 and the report was set aside. A decision was then made to further investigate the advantages of the following three options regarding the function of Statsbygg: a) a central agency, b) a project management entity, c) an ownership entity. A large committee involving many ministries should analyze the situation and come up with recommendations and in June 2004, the Minister for Innovation and Administration, Morten Andreas Meyer, established an interdepartmental committee to examine the possibilities of a more effective central-government building and property management system. The purpose of the work was to propose changes that would yield the most effective possible central government building and property management, and to ensure that the players would have the right incentives to contribute to this. The proposed solutions should be considered in the light of the principles of the Government’s modernization program. (NKS - Nordisk Kontakt om Statsbygninger, 2000 -2009).

The main problems and challenges faced by central government at this time were a dilemma between effective use of resources and political involvement, considerable maintenance and investment backlogs outside the lease system, lack
of clarity regarding what central government should own or lease as well as managing properties of cultural and historical value.

The committee carried out an extensive research in this area and visited the other Scandinavian countries to examine their methods and strategies. Several alternatives were discussed and the main proposals of the committee were:

(Udvalget for statens bygge- og eiendomsforvaltning, USBE, 2005)

- Introduce a lease system for prisons, universities and others based on the model of Statsbygg
- Introduce an organizational split between user/tenant and the facility manager
- Handle the maintenance backlog
- New financing arrangement for the properties of the central government of cultural and historical value with a combination of lease and finance over the budget
- Organize all facility management in entities like Statsbygg, giving increased financial stability
- Establish a new entity called „Undervisningsbygg“ for all higher level education
- Transfer prisons and other special purpose buildings to Statsbygg
- Create an advisory directorate
- Possible competitive outsourcing should be left to the entities themselves
- Leasing in the market and new construction by central government shall go through the same decision-making process (financial criteria)
- Establish a central government company for selling property (Danish model)

The most important consequences of these proposals for Statsbygg were:

- Freedom of choice of supplier – a more competitive situation
- Lease in the market and investing in new buildings will be compared on equal terms
- No changes in affiliation form
- Competitive outsourcing is a company issue
- Possible increased volume of properties of cultural and historical value
- The prisons and other special purpose buildings transferred to Statsbygg
- Colleges and Universities transferred to „Undervisningsbygg“
- A small advisory directorate established
- Many people affected
- Statsbygg’s regional structure changed

Although these proposals were published in 2005 and were in general well received, it has taken several years to implement the new policy. Statsbygg still constructs all university buildings but is not the owner of the real estate and is therefore not involved in the facility management. The agency owns and operates all real estate operated in other countries by the Norwegian Foreign Service. The
Prisons (35 prisons – 480 buildings) were transferred to Statsbygg in January 2009, partially because of the extensive maintenance backlog they were facing. Prisoners are expected to participate in the maintenance work. (Statsbygg, 2009).

**Other public real estate authorities**

**Hospitals** are state owned in Norway and in entities named Helsebygg. The hospital development project Hospital Development Project for Central Norway (Helsebygg Midt-Norge) has dual ownership, being responsible both to the Ministry of Health and the Ministry of Education and Research. The Central Norway Regional Health Authority owns several hospitals in the area and derives its funding from the Ministries. All secondary and tertiary health care in the region is funded and administered through this mechanism (Helsebygg Midt-Norge, 2009).

**Defense** real estate is owned by the Ministry of Defense but The Norwegian Defense Estates Agency, NDEA (Forsvarsbygg), an administrative agency subordinate to the Ministry of Defense, has the primary tasks of planning, constructing, administering, leasing and selling defense estates and properties (Forsvarsbygg, 2009).

In the case of court houses and police stations, Statsbygg owns and manages some of them, but these authorities can also rent property on the private market or own and manage it themselves.

**Table 2-5 - List of public real estate authorities in Norway**

<table>
<thead>
<tr>
<th>Category of real estate</th>
<th>Authority in charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Office buildings</td>
<td>Private market + Statsbygg</td>
</tr>
<tr>
<td>2. Defense / Military facilities</td>
<td>The Norwegian Defense Estates Agency</td>
</tr>
<tr>
<td>3. University facilities</td>
<td>Universities (construction by Statsbygg)</td>
</tr>
<tr>
<td>4. Hospitals</td>
<td>The Hospital Development Project</td>
</tr>
<tr>
<td>5. Prison facilities</td>
<td>Statsbygg</td>
</tr>
<tr>
<td>6. Facilities abroad (foreign service)</td>
<td>Statsbygg</td>
</tr>
<tr>
<td>7. Cultural buildings (listed + museums)</td>
<td>Statsbygg</td>
</tr>
<tr>
<td>8. Premises of Heads of State</td>
<td>Statsbygg</td>
</tr>
<tr>
<td>9. Court houses and police stations</td>
<td>Private market + Statsbygg</td>
</tr>
</tbody>
</table>

Statsbygg: The Norwegian Public Construction and Property Management
2.7 Methods and strategies in Denmark

In 1990 the Danish Properties Directorate (Ejendomsdirektorat) under the Ministry of Housing and Building was abolished and resurrected The National Palace and Properties Agency (as Slots- og Ejendomsstyrelsen, SES). Simultaneously, the rules on administration of the office properties and premises of the state changed. While the Properties Directorate had placed office properties and premises and a wide range of services at the disposal of ministries and agencies free of charge, the new rules implied that the users now were to pay in order to use the premises and the service. The new status of SES as a national enterprise involved a larger financial margin, including permission to sell consultancy and certain kinds of property services to municipalities and counties. During the first decade SES employed around 1,000 people but that number was reduced to 300 – 400 in the year 2000 when many units were sold to private firms and the majority of the performed activities such as security and cleaning were outsourced. (Slots- og Ejendomsstyrelsen, 2000).

In 2001 the so-called SEA reform entered into force (SEA = Statens Ejendoms Administration; The Real Estate Administration of the State). The purpose of the reform was to create market oriented property administrations that could work on roughly the same terms as the private market. The reform implied more freedom to act for both the landlords and tenants, and to SES the reform opened up the possibility of also constructing new buildings. This reform involved a transfer of ownership of large quantities of real estate from other institutions to SES and The Danish University and Property Agency (Statens Forsknings- og Uddannelses-bygninger, SFOU) which is under the Ministry of Science, Technology and Innovation (Danish University and Property Agency, 2009).

SES was in 2001 transferred to the Ministry of Finance. During the next few years SES moved towards a market based renting system. Court houses were transferred to the SES portfolio in the year 2005 and police stations in 2007. (Slots- og Ejendomsstyrelsen, 2009).

The third largest public real estate owner in Denmark is The Defense Building Services (Forsvarets Bygnings- og Etablissementstjeneste) and in 2002 all
military facilities within SES were transferred to that entity (Danish Defence, 2009).

The Danish Prison and Probation Service (Kriminalforsorgen) has activities at almost 80 locations all over Denmark, including 10 workplaces in Greenland and the Faroe Islands. This authority is responsible for the construction and facility management of all prisons in Denmark (Kriminalforsorgen, 2009).

The public hospitals in Denmark are owned and run by the regions.

Table 2-6 - List of public real estate authorities in Denmark

<table>
<thead>
<tr>
<th>Category of real estate</th>
<th>Authority in charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Office buildings</td>
<td>Private market + The Palace and Properties Agency</td>
</tr>
<tr>
<td>2. Defense / Military facilities</td>
<td>The Defense Building Services</td>
</tr>
<tr>
<td>3. University facilities</td>
<td>The University and Property Agency</td>
</tr>
<tr>
<td>4. Hospitals</td>
<td>Municipalities / regions</td>
</tr>
<tr>
<td>5. Prison facilities</td>
<td>The Prison and Probation Service</td>
</tr>
<tr>
<td>6. Facilities abroad (foreign service)</td>
<td>Ministry of Foreign Affairs</td>
</tr>
<tr>
<td>7. Cultural buildings (listed + museums)</td>
<td>The Palace and Properties Agency</td>
</tr>
<tr>
<td>8. Premises of Heads of State</td>
<td>The Palace and Properties Agency</td>
</tr>
<tr>
<td>9. Court houses and police stations</td>
<td>The Palace and Properties Agency</td>
</tr>
</tbody>
</table>
2.8 Comparative studies in the Nordic countries

Several comparative studies have been carried out in the last 10-15 years in this field where the methods and strategies in the Nordic countries have been discussed. Most of them, however, have excluded Iceland - probably because that system is so different from the others.

In a comparison of the Nordic organizations that manage public real estate presented by The Swedish National Property Board in 1994 the conclusion was that there does not exist one definite Nordic model for public real estate management. In spite of this, all the entities under observation had several common core activities including ownership, portfolio and facility management. All of them were moving away from the concept of being a building owner towards being a space provider, i.e. the focus was shifting from being a passive owner of a facility towards being a service oriented landlord. Privatization and competitiveness were the key-words for the future development (Statens fastighetsverk, 1994).

In a study on public real estate management in Denmark, Sweden and Finland, initiated by The Norwegian Public Construction and Property Management in 2002 the focus was on the general organization of the real estate entities. The basic conclusion of this report is that public real estate management should be in centralized and professional real estate entities owned by the state (PWC Consulting, 2002).

Denmark has through the decades had a rather decentralized approach to public real estate management compared to the other Scandinavian countries. The government is, however, slowly moving away from being relatively market oriented in this field towards being more centralized (Udvalget for statens bygge- og eiendomsforvaltning, USBE, 2005).

In a strategic benchmarking exercise of the Nordic government real estate companies, initiated by the Finish Senate Properties in 2001, fields like mission, vision, goals and targets, business areas and management processes were compared. The results show that the strategy in Iceland is noticeably different
from the other Nordic countries, basically on the grounds that Iceland does not have a real estate management entity that owns public buildings and practices portfolio management. In the other countries the prime vision of the entities is to be the best of the breed in the field of real estate management, for instance as the *benchmark of the industry* and as the *preferred choice for government real estate space users*. Common to the entities in all the countries is that they practice project management, property management and advisory services regarding civil engineering and technical matters to their clients (PriceWaterhouseCoopers, 2001).
2.9 Methods and strategies in other European countries

The tendency in many countries during the last decades has been towards a more active management of real estate within both the private and the public sectors (Krumm, 2001). The overriding and traditional tasks of public real estate agencies in the European countries have been to provide space for different needs of a plethora of state functions and organizations and to act as guardians of large portfolios of valuable historical buildings. In the last decade the public real estate agencies have encountered new demands for efficiency, customer orientation and market conformity (or outright privatization), and in this situation many of them have looked for new strategy models and tools.

An organization, Network of Public Real Estate agencies in Europe (PuREnet) has been established with the objective of exchanging experience between the members which are ministries, state agencies and other state organizations from 14 European countries, including all the Nordic countries except Iceland. The members have different historical backgrounds and functions within different political, economic and financial surroundings but they have an overall joint mission of efficient handling and management of state owned properties. A working group of this network published a report in 2008 on strategy models and tools used in public real estate agencies in Europe (PuREnet, 2008).

Although the report concludes that there is no one specific strategy model that could be recommended in preference of others it gives examples of possible common strategic themes for public real estate agencies in Europe. It is concluded that across the board, the development goes in the direction of further centralization of public real estate, i.e. in most instances the states have chosen to gather most of their property management tasks into one or more specialized public real estate agencies. The benefit of this method is considered to be for example: economies of scale, improved efficiency, implementation of best practices, development of specialized functions, optimization of resources, risk sharing and creation of flexibility via a large pool of assets. Small countries, in particular, risk inefficient resource utilization with small state-owned units that manage small portfolios, so for them it is especially relevant to gather property
portfolios in order to achieve a critical mass. Contrary to the general tendency in Europe of centralized organizations, the UK has developed a completely different approach where public real estate is still the responsibility of each ministry but a coordinating organization, Office of Government Commerce, OGC, has responsibility for embedding effective property asset management in central civil government and benchmarking the performance. OGC has no authority to direct other government departments but instead it issues guidelines and has an advisory role (Office of Government Commerce, OGC, 2009).

In the report an interesting attempt is made to cluster the organizations into three categories: classical administrator, new administrator and market player. The three types of organizations are located on a continuum from administration to market in Illustration 2.2 below:

**Illustration 2-2 - Categorization of real estate authorities**

<table>
<thead>
<tr>
<th>Classical administrator (cost-effectiveness)</th>
<th>New administrator (enterprise mimicking)</th>
<th>Market player (market mimicking)</th>
<th>Private company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td></td>
<td>Market</td>
<td></td>
</tr>
</tbody>
</table>

The result of this categorization is as follows:

- Classical administration: Italy, Greece and Spain
- New administration: Denmark, Norway, Sweden and Germany
- Market player: Finland and Austria

In this context the British OGC is categorized as a coordinating organization and the ministries would then fall under the category of classical administrators.
3. Results and discussion

The information supplied in chapter 2 will be deliberated here, it analyzed and linked to academic theories and discussion. In the sub-chapters the structure of the Icelandic system is discussed, how the Chain of Command is linked to the implementation of these issues in Iceland. Furthermore, New Public Management (performance management) is reflected on and the doubts that have surfaced in recent years on the effectiveness of it. Furthermore, a comparison is made between the public real estate management structures used in the Nordic countries and an effort made to analyze and categorize their similarities and dissimilarities. Different types of lease methods and the economies of size are discussed in connection with the other Nordic countries. The merger of government agencies is contemplated as well as a discussion on construction committees often appointed by ministries in connection with their construction projects. A few options in public real estate management that might be desirable for Icelandic authorities to explore are presented, followed by a discussion on their advantages and disadvantages. Finally, a proposal of certain alternatives recommended for further examination and development is presented.
3.1 The structure of the Icelandic system

Government agencies can be categorized by projects as follows: (Arnar Þór Másson, 2004):

- Production and service for the general public
- Administration
- Supervision and policing
- Servicing the public sector – internal service

Both Government Construction Contracting Agency and Government Real Estate belong to the last of the above categories as they only supply internal service. In daily activities GCCA is however often referred to in regard to the administrative role of the agency and even its supervisory function within the administration. This can be considered natural in connection with the agency’s leadership role. Still, the Government Construction Contracting Agency has neither the position of an administrative agency nor supervisory agency according to the above categorization. It is important to keep this in mind when identifying the options in public real estate management.

As discussed earlier, the current public real estate management structure gives the ministries several options when negotiating for new facilities. When a decision has been made to look for new facilities for a ministry or its agencies the relevant ministry, in co-operation with the Ministry of Finance, faces the choice of new construction, move into an existing building owned by the state or lease a new or existing building. General rules or regulations about which method to use are not available, but the Ministry of Finance is the entity responsible for real estate related matters and makes the decision on a case by case basis, in co-operation with the relevant ministry.

If a decision is made to lease a property there are in general two options; to lease on the private market or to go to The Government Real Estate, and to further complicate the matter the GRE in some cases is the lessee on the private market and then subleases the property to the relevant public entity. If a property is leased on the private market, with or without the involvement of GRE, a market based rent is paid, but if the property is owned by the state and leased from the GRE then a so-called operation based rent is paid. In an operation based rent the
cost of initial investment is not included. Before facilities are leased a feasibility study for the housing requirements of relevant entity is carried out and demands for the facilities are set forth. The preparatory work is in general carried out by GCCA in co-operation with the Ministry of Finance and the relevant ministry.

If the entity looking for new premises decides to move into a building owned by the state, and is not managed by GRE, then GCCA carries out similar studies as described before, but in this case no rent is paid. The lessee itself takes care of maintenance and management of the building and receives yearly appropriations from the state budget to cover that cost. When entities take this route GRE is not involved in the process.

When a decision is made to construct new facilities, the Act on Public Construction governs, as discussed in detail in chapter 2.3.2, where GCCA operates in close co-operation with the relevant ministry under the supervision of the Ministry of Finance. In this case GRE does not get involved until construction has been completed and then only if the relevant ministry contracts with the agency to manage the property against a payment of operation based rent.

Illustration 3.1 demonstrates contractual relationships in construction projects involving the GCCA. This is a relatively complex arrangement and will be explained further below but otherwise a reference is made to the relevant regulation (Fjármálaráðuneytið, Reglugerð um skipulag opinberra framkvæmda, nr. 715/2001, 2001):
Directions for Illustration 3.1

1. When preparing a public construction project a so-called feasibility study should be prepared to explore the practicability of the project. Relevant ministries are responsible for this work and it can be done by their own employees, they can get consultation from the private sector or the Government Construction Contracting Agency.

2. If the outcome of the feasibility study is positive the relevant ministry seeks authorization from the Ministry of Finance to start the design stage. The Ministry of Finance consults the Government Construction Contracting Agency before authorization is granted and checks the financing of the project.

3. Following the authorization of the Ministry of Finance the relevant ministry contracts with the designers on the design of the project but is to consult the Government Construction Contracting Agency regarding the form and content of the contract. Attention is drawn to the fact that there is no contractual relationship between the Government Construction Contracting Agency and the designers.
4. At the end of the design stage the relevant ministry seeks authorization from the Ministry of Finance to start the construction project. The Ministry of Finance consults the Government Construction Contracting Agency before authorizing the project and inquires also about the financing of the project.

5. When the Ministry of Finance has authorized the project the relevant ministry contracts with the Government Construction Contracting Agency to put the project up for tender and supervise it as it is stipulated in law that the GCCA is responsible for and supervises this part of the project.

6. After the tendering, the relevant ministry contracts with the contractor for the execution of the construction project, based on information supplied by the Government Construction Contracting Agency. Attention is drawn to the fact that there is no contractual relationship between the GCCA and the contractor as the agency represents the ministry to the contractor. The role of the relevant ministry is therefore, at this stage, to sign the contract with the contractor and finance the project.

7. The Government Construction Contracting Agency handles the bookkeeping and payment service for the project, is responsible for the progress and supervises the contractor during the project. The agency can assign an outside private entity by written contract to supervise the project.

8. At the completion of a project the Government Construction Contracting Agency hands it over to the ministry for management and prepares a close-off report which is a comprehensive analysis summary of the project.

9. If the relevant ministry determines to hand the completed building over to the Government Real Estate for management and maintenance, and an agreement can be reached, it will pay so-called operation based rent to GRE.

It is evident that the above procedures can evoke various questions or problems regarding the interaction of power and responsibility. The most obvious example regarding a possible conflict is when the relevant ministry hands incomplete project specifications from the designers over to the Government Construction Contracting Agency. In such cases there is considerable likelihood of an increase in volume and additional work during the project time that leads to increased construction cost. This additional cost needs to be recovered from the relevant ministry by the Government Construction Contracting Agency but the ministry would then need to get additional funds from the legislative body Althing which can, understandably, be problematic. The natural, initial response of the relevant ministry is to protest the increased cost or, at least, doubt the grounds. It is then the role of the staff of the GCCA to justify and substantiate the additional cost and it is certain that a common understanding can be difficult to reach in such cases.

It has also been maintained by the representatives of some ministries that the staff of the Government Construction Contracting Agency lack initiative to keep the projects within the frame of the cost estimate as the additional cost must always
be paid by the ministries as the agency itself has no funds to draw from. The GCCA is entirely financed by selling service to ministries and public organizations and does not get direct financing from the State Budget. It can therefore be maintained that the legal power of the Government Construction Contracting Agency in the execution of a construction project is considerable, especially when considering the fact that the financing is the responsibility of another entity and therefore it may be said that power does not correspond to responsibility. This element is discussed further in chapter 3.2 in relation to the Chain of Command.

The framework for the Government Real Estate is very different from that of the Government Construction Contracting Agency as has been discussed above, even though both agencies are pure service agencies within the public sector. The Government Real Estate maintain and manage certain buildings through contracts made with the relevant ministries and subject to consultation with the Ministry of Finance. The users of the buildings pay monthly rent which is a reimbursement of the cost of managing and maintaining them as well as including a fee for the agency or a so-called operation based rent. Ministries and their organizations are permitted to lease buildings on the private market but the difference is then that they have to pay market based rent and as a result, there is no real competition between the Government Real Estate and lessors on the private market. The policy of the Ministry of Finance has been for years that the state does not construct office space but leases it on the private market and in the last few years this approach has been transferred to more specialized buildings like nursing homes and research facilities.
3.2 Comparison between the Nordic countries

As stated in chapter 2.8 regarding comparative research in the Nordic countries regarding structure and methodology in public real estate management, the development for the last few decades in Scandinavia seems to be towards a more central and specialized public facility management entities that own their property and collect market based rent for the facilities leased. The development in Iceland has partly been in this direction but the step towards ownership of property has not been taken which creates a fundamental difference between the Icelandic method and the development in the other Nordic countries.

Also, as mentioned above, privatization and competition have been the key words for future development in this sector for the last few decades in the Nordic countries, which is consistent with the ideology of New Public Management. These objectives are still emphasized in all the countries even though the privatization has been elaborated in different ways and in some instances diluted to some extent; for example in Sweden where the real estate entity Vasakronan AB was sold to Swedish pension funds 16 years after the privatization process began and in Norway when it was decided not to sell one of the largest real estate entities in the country, Entra Eiendom AS, nine years after it was established but they had taken over from Statsbygg the property that was considered in competition with the private market.

Regarding the question regarding the connection between political streams and the models for public real estate management in the respective countries the general conclusion is that since the objectives of these management models are by nature long term and cannot easily be changed as the winds turn in the political arena, the models do not appear to be extremely sensitive to political streams.

In Table 3.1 an attempt is made to summarize the results from the studies of the five Nordic countries from chapter s 2.3. to 2.7 regarding the nine categories of public real estate that was examined. A filled square indicates that the category referred to is managed by the central real estate agency named at the top of the column, but if there is another managing entity its name is listed in the square. Where the word private market is in a filled square it indicates a mixed system
where there is competition between the private sector and the central entity. Where the word *regions* appears in the table it is a synonym for municipalities, regions, districts and counties.

### Table 3-1 - Management of public real estate in the Nordic countries - Comparison

<table>
<thead>
<tr>
<th>Categories</th>
<th>Denmark</th>
<th>Finland</th>
<th>Iceland</th>
<th>Norway</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Office buildings</td>
<td>Private market</td>
<td>Private market</td>
<td>Priv. market Ministry</td>
<td>Private market</td>
<td>Private market</td>
</tr>
<tr>
<td>2. Defense / Military facilities</td>
<td>FBE</td>
<td>Ministry</td>
<td>Forsvarsbygg</td>
<td>Fortifikationsverket</td>
<td></td>
</tr>
<tr>
<td>3. Universities</td>
<td>SFU</td>
<td>New entity in 2010</td>
<td>Ministry</td>
<td>Universities</td>
<td>Akademiska Hus</td>
</tr>
<tr>
<td>4. Hospitals</td>
<td>Regions</td>
<td>Regions</td>
<td>Ministry</td>
<td>Helsebygg</td>
<td>Regions</td>
</tr>
<tr>
<td>5. Prisons</td>
<td>Kriminalforsorgen</td>
<td>Ministry</td>
<td>Specialfastigheter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Facilities abroad (foreign service)</td>
<td>Ministry</td>
<td>Ministry</td>
<td>Ministry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Cultural buildings (listed + museums)</td>
<td>Ministry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Premises of Heads of State</td>
<td>Office of President</td>
<td>Office of President</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Court houses ad police stations</td>
<td>Private market</td>
<td>Priv. market Ministry</td>
<td>Private market</td>
<td>Private market</td>
<td></td>
</tr>
</tbody>
</table>

For names in English and abbreviations please refer to individual tables in chapters 2.3 till 2.7

The table shows interesting similarities, dissimilarities and trends which will now be summarized:

**Office buildings**

All the Nordic countries, except Iceland, have central real estate management entities or central entities that build, own, manage and lease out office space to ministries and agencies. Those entities are all in direct competition with the private market and some of them own subsidiaries that are active on the private
leasing market. All leasing agreements are based on competitive market rent except in Iceland where the central entity the Government Real Estate (GRE) does not own the facilities but takes care of maintenance and facility management of selected buildings and charges a rent that is exclusive of the initial investment cost and as a result not in direct competition with the private sector.

Defense /Military facilities
Only in Finland does the central entity own and manage the defense/military properties. In Denmark, Sweden and Norway there are separate specialized real estate entities, organized in a similar way as the central one, that manage these facilities. In Iceland the Ministry for Foreign Affairs has been responsible for such properties, but by 2010 the responsibility will be transferred over to the Ministry of Finance. It should be noted, however, that there is no military force in Iceland on a permanent basis, so this category is not a major issue in Iceland.

Universities
In this category only in Finland the central entity has the university buildings as a part of its portfolio, but that is changing in 2010 when a new management entity will be established and take over. In Denmark and Sweden there are specialized real estate entities that manage the properties. In Norway each university manages its facilities but the central entity assists in the construction of new facilities. In Iceland the Ministry of Education, Science and Culture is responsible for this category but has handed the daily management over to the universities or the Government Real Estate. In all instances the central entity, the Government Construction Contracting Agency handles construction of new buildings and renovation.

Hospitals
In Denmark, Finland and Sweden hospitals are owned and managed by the regions or municipalities. In Norway they are state owned and managed by specialized real estate entities owned by the state. In Iceland the hospitals are state owned and the largest two manage their own facilities, but the others are managed by the central entity, the Government Real Estate. In all instances the
Government Construction Contracting Agency has handled construction of new buildings and large scale renovation projects.

**Prisons**
In two countries, Finland and Norway, the central entity owns and manages the prisons. In Finland this has been the case for many years but 2009 is the first year for this system in Norway. Denmark and Sweden have other specialized real estate entities constructing, maintaining and managing the prisons. In Iceland the Ministry of Justice and Human Rights has the responsibility for facility management of the prisons and the Government Construction Contracting Agency assists in the construction of new facilities and renovation projects.

**Facilities abroad (foreign service)**
In two countries, Norway and Sweden, the central entity owns, maintains and manages the facilities of the Foreign Service, but in the other countries the Ministries for Foreign Affairs are responsible for the construction and management of the properties. The Icelandic central entity, the Government Construction Contracting Agency assists in the construction of new facilities and renovation and there is discussion in Finland to go that route as well. In Berlin the five Nordic countries manage a joint embassy area where each country has their own embassy but other facilities are shared, include the so-called *Felleshus*. The Norwegians and Swedes proposed establishing a joint owners committee, *Owners’ Group*, which addresses the issues concerning investment, maintenance and general management of the property. Another joint committee, *Users’ Group*, acts on behalf of the users as lessees. This cooperative Nordic projects reflects clearly the different emphasis depending on whether the ownership is in the hands of the central entity or not.

**Cultural buildings (listed and museums)**
In all the countries, except Iceland, the bulk of the buildings in this category is owned and managed by the central authority both in regard to ownership and management. In Iceland these buildings are managed by different Ministries, depending on the use of each building.
Premises of Heads of State
In Denmark, Norway and Sweden, where the Heads of State are Kings and Queens, the central entity manages the Royal premises. In Iceland and Finland, where the Heads of State are elected Presidents, the Office of the President is responsible for facility management of the premises.

Court houses and police stations
Similar to the category of office buildings in Finland, Norway and Sweden the central entities construct, own, maintain, manage and lease out court houses and police stations to ministries and public organizations in direct competition with the private sector. Denmark is the exception in this case where the central entity is responsible for this category but in Iceland it is in the hands of the Ministry of Justice and Human Rights.

Summary
It is clear that the Icelandic public real estate management system is considerably different from that of the others. The other Nordic countries all have central agencies that construct, own, manage and lease a great majority of the real estate that ministries and public organizations use, not including general office facilities though. Commonly, market based rent is paid for the facilities leased and organizations are required to be profitable as if they were real estate companies on the private market. When a market based criteria does not apply, a so-called cost based rent is calculated but then the rent amount is based on the expense of the lessor in constructing, owning and managing the real estate concerned. In Iceland the real estate is owned by the state and operation based rent is paid to the managing entity and a different entity constructs buildings for ministries and public organizations.

Until 2001 the system and procedures in Denmark were similar to the current system in Iceland. The customer was the relevant ministry on behalf of the subordinate agencies but the real estate management entity SES had the role of consulting and supervising during the preparation stage of construction projects.
Commonly the customer appointed construction committees made up of representatives from the users and the ministry. The role of SES varied from advising on size and type of accommodation to completely handling the design process. At the execution stage the designers put the project up for tender, prepared the contracts and supervised the construction project, all under the supervision of the relevant ministry which which the paid the bills (Hörður Kristjánsson, Leifur Benediktsson, 1991).

In 2001 the Danes revised the system and transformed it to a more market oriented system as had been done in Sweden in 1992, in Norway in 1993 and in Finland in 1995. On the whole, it can be maintained that this methodology of central real estate management entities the four countries adopted in the years 1992 to 2001 has been relatively successful, but still change is anticipated in Sweden. The change in Sweden probably involves increasing the number of specialized real estate entities instead of having one large unit. In Norway, right wing governments have attacked the system and wanted to reduce the activities of Statsbygg but have not been successful in their attempts. In Finland the entity concerned is a relatively independent public company and not an agency but presently the discussion involves a shift towards less independence and probably making it into a government agency.

The conclusion of a Norwegian committee which in 2005 carefully examined the public real estate management systems in Sweden, Finland and Denmark was that even though the operation in all the countries was based on a similar ideology for central real estate management entities and market based rent, no definite organizational model could be considered better than others (Udvalget for statens bygge- og eiendomsforvaltning, USBE, 2005). This conclusion is partially mirrored in the discussion in this thesis and in the summary in Table 3.1.
3.3 New Public Management

When New Public Management was introduced in the early 1980’s it was meant to be an alternative to old public management, which was representing centralized, integrated and extensive government. In their paper “Transcending New Public Management - A Transformative Approach to Increased Complexity and the Challenges of Balancing Autonomy and Control” Christensen and Lægreid discuss the experience gathered during the first decades of NPM and reach the conclusion that the biggest flaws of this management system were its efforts to divorce management from policy and to slice managerial process into rather unconnected elements.

When the post-NPM measures emerged in the late 1990’s, they could primarily be seen as a kind of reaction to the effects and implications of NPM-related reforms. The undermining of control and central capacity that NPM brought was addressed by vertically integrating some of the agencies and enterprises again, either by dissolving some agencies and integrating their activities in the ministries, or by establishing more controls and constraints on the agencies and state-owned enterprises. While NPM introduced a much more specialized cultural perspective, according to which each and every specialized public organization should develop its own culture, the message from the post-NPM measures was that there should be more emphasis on a holistic perspective. NPM did bring a tilt in the balance of control and autonomy in favor of autonomy, but when the post-NPM reforms came along the balance tilted back somewhat towards more control, but still not back to the balance of the old public administration period (Christtensen, T. and Lægreid, P., 2008).

This general trend is in line with the current trend in the Nordic countries as can be seen in chapter 2.8 on comparative studies. In a study on public real estate management in Denmark, Sweden and Finland carried out in 2002 the basic conclusion was, however, that public real estate management should be performed in centralized and professional real estate entities owned by the state. To further emphasize the existence of this trend a reference is made to a report published in 2008 by the Network of Public Real Estate agencies in Europe (PuREnet) where it is concluded that across the board, the development goes in the direction of
further centralization of public real estate, i.e. that in most instances the states have chosen to gather most of their property management tasks into one or more specialized public real estate agencies.

Denmark has through the decades had a rather decentralized approach to public real estate management compared to the other Scandinavian countries. The government is, however, slowly moving away from being relatively market oriented in this field towards being more centralized. In Finland, the central real estate management entity, Senaatti, is an unincorporated state enterprise that finances its operations independently and it does not fall within government on-budget finances. Currently a committee established by the Ministry of Finance is evaluating the most feasible status of Senaatti and it is considered likely that the enterprise will become an in-house entity.

The general conclusion is that governments in the Nordic countries favor the methodology of NPM with the reservation that management should not be divorced from policy and there should be more emphasis on a holistic perspective. The Nordic countries, except Iceland, have therefore chosen to gather most of their property management tasks into one or more specialized public real estate agency owned by the state.
3.4 Chain of Command

As discussed in chapter 2.2 the principal element of the Chain of Command is that in an organization the authority of command moves down the organizational chart in the way that each individual is directly responsible to the senior officer. Power is one of the preconditions of responsibility and power without responsibility is contrary to the basic ideology of democracy and equality (Haukur Ingibergsson, Guðríður Þorsteinsdóttir, Margrét Hauksdóttir, Valur Árnason, 2000).

When considering public construction projects in Iceland in view of the chart in Illustration 3.1, where the contractual relationship of ministries and public organizations with designers and contractors is illustrated, it is clear that a certain problem of the principal agent is integrated in the system or, in other words, that the Chain of Command does not function to a full extent. The Government Construction Contracting Agency is subordinate to the Ministry of Finance and as the agency has no Board of Directors, the Minister of Finance is the superior officer of the director of the agency. The legal and regulatory environment of the construction projects instructs that the relevant ministry handles and is responsible for the preparation and design of buildings. The product at the completion of the design stage are the so-called tendering specifications which are blueprints, specifications, lists of quantities, the cost estimate as well as tendering and contractual terms. The Government Construction Contracting Agency is responsible for the text of the tendering and contractual terms but the relevant ministry is responsible for other elements. The Ministry of Finance authorizes the project after consulting their specialists in the field - the Government Construction Contracting Agency and after the relevant ministry has secured funding from the State Budget.

In the case of original cost estimate overrun, independent of the cause, it is the responsibility of the relevant ministry to seek additional funding to conclude the project. Despite the above mentioned statute that the Government Construction Contracting Agency is responsible for the execution of the construction project the agency only services the relevant ministry and has no funding to meet unexpected expenses. The relevant ministry has, however, limited opportunities to influence the progress of the project after the Government Construction
Contracting Agency has taken it over, even though there is a provision stipulating an obligation of regular supply of information. The GCCA is not an agency responsible to the relevant ministry and therefore the relevant minister has no administrative authority over the director of the Government Construction Contracting Agency. This is contrary to the fundamental thought in the Chain of Command and therefore it can be maintained that there is integrated tension in the system between the GCCA on the one hand and the relevant ministries on the other and which is likely to be released in the project settlement. This is illustrated in Illustration 3.2 but for comparison reference is made to Illustration 2.1 where the Chain of Command in ministerial administration is described.

Illustration 3-2 - Problem of the principal agent theory in construction projects

Construction committees which, as stated before, lack legal foundation considerably complicate the Chain of Command and power of authority because it is often unclear whether power has been assigned to them, and in the instance of external assignment of power\(^2\), whether such an assignment is according to administrative law. The power and responsibility of construction committees with respect to the Government Construction Contracting Agency is often vague which again increases the risk of construction projects being inadequately organized. If construction committees are added to Illustration 3.2 the outcome is as shown in Illustration 3.3.

Illustration 3-3 - Problem of the principal agent theory in construction committees

\(^2\) See discussion on external and internal assignment of power in Chapter 2.3.5
Sigurdur Thordarson, former Auditor General of Iceland, discussed among other things power and responsibility within the Icelandic public administration in an address he gave at the breakfast conference „The Profitability of Good Administration“, which the Ministry of Finance, The Association of Directors of State Agencies and The Institute of Public Management and Politics at the University of Iceland held on March 9th 2005. There he said that The Icelandic National Audit Office has in many reports drawn attention to the importance of adhering to rules regarding responsibility and the need to clarify vague rules. Often questions have been asked regarding the scope of responsibility of the highest ranking government officials and directors of public organizations, especially because of the comprehensive changes that have been made in public management in the last ten to fifteen years. One of the main characteristics of the change has been the transfer of administrative power to government agencies. It has been pointed out that the lack of clarity of the responsibility of directors of government agencies was not as critical in the centralized state management that has been prevalent for most of the last century. However, with increased decentralization the demand for a clear definition of the responsibility of directors and other managers also increases. According to Sigurdur good administration is characterized by clear rules regarding power of decision making and being responsible for those decisions (Sigurður Þórðarson, 2005). The position of the former Auditor General of Iceland on how to approach the Chain of Command in public administration in Iceland is in accordance with the comments in this thesis regarding the dilemma of the principal agent theory which seems to be an integral part of the environment of the Government Construction Contracting Agency.
3.5 Different leasing methods

In the policy regarding New Public Management the Icelandic government introduced in 1996 it was pronounced that the aim would be towards the so-called *market based rent* when leasing public real estate. Despite the fact that a large part of the policy has been realized in the years since it was introduced, this clause has still not come into effect. The reason for the delay is not obvious, however, the need for change is clear because today there is actually a threefold system in state management as some organizations pay *market based rent*, others pay *operation based rent* to the Government Real Estate and still others pay *no rent* as their operations are situated in facilities „owned“ by them. Operation based rent is paid when the facilities are state owned and managed by the Government Real Estate and the start-up cost is fully depreciated. This type of rent is about 25% to 50% (depending on location) of general market rent where the financial investment in the real estate in question is considered (Stjórnhættir, 2006). In the instances where ministries and public organizations have funding from the State Budget to build facilities for their operations and choose to manage the real estate themselves no rent is paid but allocations towards operations and maintenance are provided for in the State Budget. Such allocations are subject to evaluation in each instance but often the cut-backs are directed at the maintenance part as postponing maintenance for one year is often considered less painful than many other undertakings. However, as many examples have shown, such postponements tend to occur year after year and finally turn into decades with the final result of negligence towards maintaining public buildings.

There are no rules regarding what organizations can lease public real estate at the above mentioned discount rate, what organizations need to seek accommodation on the private market or what organizations do not have to pay any rent. Comparison of the cost of operation between similar organizations needs to take note of this possible discrepancy.

As stated in this thesis it is the general rule in the Nordic countries where there is an active lease market to compare or compete with, the criteria is *market based rent*. In the instances where such a market does not exist the general rule is cost
base rent, i.e. rent that reflects the cost of the state to own and manage the real estate in question.

In this connection it is interesting to examine that in the 5th paragraph of advertisement nr. 790/2001 concerning financial statements of municipalities it is stipulated that each municipality shall set up a special real estate fund to manage properties utilized first and foremost by the relevant municipality. The real estate fund is responsible for constructing, managing, maintaining, purchasing and selling real estate and leasing it to other operational units within the municipality. A so-called internal rent is calculated in coordination with real cost (cost based rent) of the investment, i.e. cost of investment expenses for the real estate in question, depreciation, taxes and insurance, maintenance cost for facilities and grounds as well as including a typical management fee for the real estate fund. The revenue of the real estate fund finances the management of the real estate (Félags- og tryggingamálaráðuneytið, 2001). There are examples of municipalities going further and placing their real estate in special real estate companies.

Now there is almost a decade since the authorities introduced this methodology to the municipalities and therefore the question arises why the state itself has not taken it up. The objective with the introduction of the above mentioned municipal real estate funds was to increase cost efficiency in housing affairs by making the total cost more visible, increasing flexibility to adjust facilities to current needs and clarifying where the responsibility lies regarding facilities. Surely, the same should apply for ministries and public organizations and the methods used by the municipalities could be realized in order to separate the management of public real estate from other activities of ministries and public organizations.

By assigning specialized state entities with the construction, maintenance, management and handling of all public real estate and adopting real cost rent, the cost of ministries and public organizations for facilities will be based on the same foundation and at the same time comparable to the private market. Such an approach seems to be the most realistic and fair methodology in public real estate management and is the method that other Nordic countries have adopted as stated above.
3.6 Merger of state agencies

In the last few years the government has discussed decreasing the number of state agencies and enlarging them. Even though they have decreased in number from 250 in 1998 to 204 in 2006 it is still considered feasible to reduce the number as more than half of public organizations have less than 50 employees (Leifur Eysteinsson, 2008). The agencies that specialize in real estate affairs are, as stated above, the Government Construction Contracting Agency with ca 25 employees (Framkvæmdasýsla ríkisins, 2009), and the Government Real Estate with ca 10 employees (Fasteignir ríkissjóðs, 2009) which makes the total number of employees of these two agencies well within the above criteria. Both these agencies are subordinate to the Ministry of Finance which is the ministry that, according to law, handles affairs of public construction and real estate.

With the possible merger of these agencies in mind the decision was made to move the offices of Government Real Estate to the second floor in the premises of Borgartun 7A when the facilities were available a few years ago, but the office of the Government Construction Contracting Agency is on the third floor in the same building. However, there is no analysis available regarding the advantages and disadvantages for such a merger and therefore this thesis may cast a light on the issue. The mergers of agencies usually have both positive and negative elements that must be evaluated in relation to other options available, because a merger is not an independent objective in itself but a way to reach other goals.

Five evaluation reports are available regarding the results of mergers of public organizations in Iceland in the last few years. According to them many things had not been concluded some years after the merger and some elements of the mergers were considered a success but others not. In all instances, though, the conclusion is that more careful deliberation would have been beneficial (Leifur Eysteinsson, 2008).

Increased means, specialization and professionalism are considered among the main advantages of mergers of public organizations as well as facilitating taking on an ever changing environment. Furthermore, the reduction in the number of public organizations increases the utilization of the facilities, manpower and capital as well as simplifying the administration and making it more efficient.
Among the most obvious disadvantages of merging public organizations is that if they are too large they may become inefficient and provide inadequate services because they lack competition. Both political, economic, social and technical elements are external essential features that have to be taken into consideration when discussing a possible merger of public organizations (Leifur Eysteinsson, 2008).

One of the legal duties of the Government Construction Contracting Agency is to promote development in the construction field, both with designers and contractors. Also the agency is required to show initiative in innovation within the domain. Innovation is attainable mostly through ongoing projects and it is possible that in a combined agency the innovation part would be based on a broader foundation as project execution and management point of view would possibly be more carefully intertwined. On the other hand, it might also be pointed out that the same result might be reached with close co-operation instead of a merger. What most strongly supports a merger of the Government Construction Contracting Agency and the Government Real Estate is that it is important that the same entity constructs, owns and manages each property, so, among other things, it is the constructor that directly profits from a low operation cost – or in other words that the life cycle cost of each building is considered.
3.7 Alternative strategies for the Icelandic government

In light of the deliberation above regarding the uniqueness of Iceland in comparison to the other Nordic countries in respect to organization and methodology in public real estate management, the author of this thesis finds it is imperative to consider what alternatives, other than the current situation, Iceland might have. Below five alternatives concerning the construction, ownership and management of real estate that ministries and their organizations use for their operations are presented. The main advantages and disadvantages of each alternative will be compared and contrasted and an attempt made to categorize them depending on how they fulfill the following eight requirements:

1. Cost based rent. The system of cost based rent (market rent) is introduced in all ministries and their agencies. This will make leasing cost more comparable between entities.

2. The Chain of Command. The basic idea behind the concept of the Chain of Command, i.e. the unity of command, is complied with.

3. Ownership. The entity that is responsible for management and maintenance of the real estate holds the ownership of the premises. This makes life cycle cost analyses more desirable.

4. Economies of scale. In real estate portfolios the economies of scale is one of the objectives, which increases the flexibility in managing public real estate and makes that industry more profitable.

5. Specialization. The management of public real estate is moved into specialized management entities which increases the specialism and makes it more efficient.


7. Supervision. The system allows for an effective supervision to ensure that laws on public procurement and public construction are followed.

8. Innovation / development. The setup involves considerable opportunities for innovation and development in construction projects.
Alternative A – System unaltered

Description of the system:
Each relevant ministry is responsible for its real estate affairs in co-operation with the Ministry of Finance. During the preparation stage of the projects the ministry has the option to seek consultation from the Government Construction Contracting Agency or others and in the design stage the ministry negotiates with the designers. At the execution stage the GCCA handles the project and is responsible for it towards the relevant ministry. At the conclusion of the project the ministry or a subordinate organization takes over the management of the property or negotiates with the Government Real Estate to manage it for a lease payment (operation based lease).

Alternative A – Advantages:
This system has been used in Iceland in the last decades and therefore experienced and well known by the relevant entities within the administration. In the last few years the relevant ministries have increasingly negotiated with the Government Real Estate to manage their property and thus the knowledge regarding the management of real estate is progressively being coordinated and concentrated within the administration.

Alternative A – Disadvantages:
As discussed in chapter 3.4 regarding the Chain of Command it is clear that the power and responsibility of the Government Construction Contracting Agency is not in concord during the execution stage and therefore it can be said that tension is integrated in the system between the GCCA and the relevant ministries and it is likely that this discord comes out during the final settlement of projects. Furthermore, in chapter 3.5 regarding the rent options it is pointed out that the current system includes a disparity between organizations depending on whether they lease their property from the Government Real Estate or on the private market as the former instance does not include investment expenses and in some instances the organizations pay no rent. This disparity is unsatisfactory and makes comparisons more difficult. Also, the system is inefficient because of lack of supervision whether the relevant ministries uphold the law in these matters as the GCCA which has the expert knowledge in the field, is a service agency for the ministries and can not oversee them at the same time.
**Alternative B – Three real estate management agencies**

*Description of the system:*

An alternative to the relevant ministries being responsible for the management of their real estate, three real estate organizations would be established. Firstly, an organization under the Ministry of Health, would manage the facilities of all hospitals in the country. Such entities are already in development both at The National University Hospital in Iceland and the Akureyri County Hospital. Secondly, an organization responsible to the Ministry of Education, Science and Culture would manage educational facilities. Such an entity is already in development at the University of Iceland. Thirdly, the Government Real Estate would manage other categories of public real estate than those mentioned above but the agency is responsible to the Ministry of Finance as stated before. In all instances the ownership would be transferred to the real estate organizations and market based rent or cost based rent introduced instead of the operation based rent that the Government Real Estate currently charges. The operation of the Government Construction Contracting Agency would be unchanged in all respects other than the agency would service three real estate agencies instead of the relevant ministries as is now the case. The role of the ministries would then first and foremost be involvement in the feasibility studies and decisions regarding the funding of lease payments.

*Alternative B – Advantages:*

A system where everyone pays cost based rent for the facilities would be adopted. As discussed in chapter 3.2 it is important when evaluating the alternatives that in the other Nordic countries the categories for hospitals and universities are usually not managed by central real estate organizations. All the three real estate organizations would benefit from the expert knowledge of the Government Construction Contracting Agency as the agency would service them in the same way as the ministries now. Inspecting whether the laws on public procurement are being upheld would be simpler as the entities would only be three and all of them specialized in the field of real estate management.

*Alternative B – Disadvantages:*

This system has the same disadvantage as is apparent in Alternative A regarding the question of power and responsibility and the tension between the GCCA and
the organizations they would be servicing. Furthermore, it is possible that such organizations came to the conclusion that they did not need the services of the GCCA as they were capable of handling the projects from beginning to end. Also there is the question whether it would not be too expensive to have three specialized real estate agencies in such a small community and that economies of scale would not be achieved.

**Alternative C – One real estate agency**

*Description of the system:*

This alternative goes further than Alternative B and instead of establishing three separate real estate entities it is proposed that the Government Real Estate manages all public real estate but the agency is responsible to the Ministry of Finance. In all instances the ownership would be transferred to the Government Real Estate and market based rent or cost based rent adopted instead of the current operation based rent. The Government Construction Contracting Agency would be unchanged in all respects except the service currently provided to the ministries would be shifted to the Government Real Estate.

**Alternative C – Advantages:**

Adopting a system where everyone pays cost base rent for the facilities. The expert knowledge inside the Government Construction Contracting Agency concerning construction projects would be utilized by the Government Real Estate but today these agencies have a close co-operation. Inspecting whether laws on public procurement were upheld would not be complicated as there would only be one specialized entity in the field of real estate management and it would be subordinate to the Ministry of Finance which is responsible for the policy area as a whole. The economies of scale is clear and all public real estate management is in one place.

**Alternative C – Disadvantages:**

Similar to Alternatives A and B this system cannot be regarded advisable considering the question of power and responsibility and the tension that might be created between the GCCA and the Government Real Estate. Furthermore, it is
very likely that the Government Real Estate would consider themselves capable of handling projects from beginning to end and that they did not need any service from the GCCA. In that case the role of the Government Construction Contracting Agency would be considerably altered and be more limited than it is now.

**Alternative D – A single real estate management agency and a merger of the Government Construction Contracting Agency and the Government Real Estate**

*Description of the system:*
This alternative is more radical than alternatives B and C and in addition to the Government Real Estate managing all public real estate, there would be a merger between the agency and the Government Construction Contracting Agency but both the agencies are responsible to the Ministry of Finance. In all instances the ownership would be transferred to the new agency that would be established and market based rent or cost based rent adopted instead of the operation based rent currently collected by the Government Real Estate. The new agency would also take over the current operation of the Government Construction Contracting Agency.

*Alternative D – Advantages:*
The same logic applies here as for Alternative C, the expert knowledge within both agencies regarding construction projects would be fully utilized, the economies of scale is obvious and all public real estate management would be in one agency. In addition to this the problems that result from the discrepancy between power and responsibility would disappear as the same entity would be responsible for all stages of the project. This is a similar system as The Icelandic Road Administration has been using successfully in recent years and corresponds with how these affairs are handled in the other Nordic countries. Some streamlining would result from the merger of these two agencies but due to their close co-operation in the last few years and the fact that they are already situated in the same building, it can be assumed that this has already been partly
accomplished. This new agency could easily lead the way regarding initiative and innovation in the construction sector.

Alternative D – Disadvantages:
No serious disadvantages are apparent when considering this alternative and it is equivalent to the system that the other Nordic countries have evolved towards through the years.

Alternative E – The British system

Description of the system:
The relevant ministries would still be responsible for their real estate affairs in cooperation with the Ministry of Finance and the ownership would also be the same. Each ministry would handle the affairs of their real estate from preparation and design to construction and management. The Government Construction Contracting Agency would be a central agency that introduces work procedures, objectives and criteria that all the ministries would be obliged to adopt in order to be able to compare the results of the different ministries. In that way the Government Construction Contracting Agency would be an administrative and supervisory agency in the field of public construction projects and a professional public entity with regard to the affairs of real estate and leasing but the Government Real Estate agency would be dissolved.

Option E – Advantages:
Coordination regarding management of public real estate within the administration could be ensured and supervision on whether laws on public procurement are being upheld would be increased. Initiative regarding coordination and innovation in the sector should be considerable.

Alternative E – Disadvantages:
This system would result in 12-14 entities handling public real estate affairs and therefore there is no question of the economies of scale and the limited size of many ministries would make it very costly to establish and run real estate management entities. This framework is also contrary to what the other Nordic countries, after extensive research, have adopted and consider successful. Also, it
is worth pointing out that the development in this country is that the ministries have firmly been moving the supervision and management of their real estate to the Government Real Estate and this would be a complete change of policy with the accompanying cost and disruption.

**Table of comparison**

In Table 3.2 the above five alternatives are shown in one comparison table where (+) is allotted if the alternative is considered fulfill the requirement, but (-) is allotted if it does not. If (?) is allotted there is doubt whether the alternative meets the requirement.

<table>
<thead>
<tr>
<th>Items examined</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
<th>Alternative D</th>
<th>Alternative E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cost based rent</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td>2. The Chain of Command</td>
<td>(-)</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
</tr>
<tr>
<td>3. Ownership</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td>4. Economies of scale</td>
<td>(-)</td>
<td>(?)</td>
<td>(+)</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td>5. Specialization</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td>6. Risk management</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td>7. Effective supervision</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
</tr>
<tr>
<td>8. Innovation / development</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>(-)</td>
</tr>
</tbody>
</table>

| Total (+) | 2 | 6 | 8 | 8 | 2 |
| Total (-) | 6 | 1 | 0 | 0 | 6 |
| Total (?) | 0 | 1 | 0 | 0 | 0 |
3.8 Recommendations for a comprehensive revision

Comprehensive legal structure for the policy area

The author of this thesis maintains, in light of the above discussion, that new administrative tools need to be developed to ensure a comprehensive and beneficial public real estate management in Iceland. The current system is based on a legal structure enacted 40 years ago and which has only undergone minor changes despite the fact that the environment has changed enormously in that time. In view of this a comprehensive review must be carried out concerning the arrangement and management of public real estate and ultimately a specific comprehensive legal structure for this policy area formulated. Such a review was carried out by the other Nordic countries, each according to their own criteria, in the years 1992 to 2001. Following those reviews they made considerable changes to their structures, in Denmark e.g. there was a very similar arrangement as is presently in Iceland. After the above mentioned changes the other Nordic countries now have basically very similar public real estate management systems even though there are certainly differences in approach. In all the countries there are real estate management agencies or companies where housing affairs are coordinated and preparation, construction, ownership and management are handled inside one entity.

It is generally acknowledged that, to some extent, the authorities need to be able to influence the management of the housing affairs of ministries and their organizations as the cost of facilities is a large part of their operation cost and as such this part of their activities as well as all others must be restrictive. It is also important that the scope of public construction is in line with the economic policy of the government at all times as major decisions regarding real estate can involve risk and mistakes have political consequences. It is therefore important that the Ministry of Finance, which handles this policy area on behalf of the government is able to govern it effectively.

Adopting a new lease system and change of ownership

The change involved in adopting market based rent or cost based rent seems quite obvious as a first step in the above mentioned revision of the legal frame regardless of whether the real estate agencies are more than one. The public real
estate agencies in the other Nordic countries have all adopted such a system, which in all major aspects has proven adequate. By adopting market based rent or cost based rent transparency is increased, real cost is more visible, flexibility is greater, economic incentives enabled and the responsibility of entities and work division made clearer. To ensure that process the relevant ministries (lessees) need increased appropriation from the State Budget to be able to handle the increased cost that the transformation entails. Organizations which are financed partly or fully by their own income might have to take on a part of the increased cost. To meet the increase in State expenditure the appropriation for investment expenses and maintenance would be terminated. Furthermore, the real estate agencies, regardless of how many they were, are expected to pay dividend. Adopting market based rent or cost based rent requires that the ownership and management of real estate is in the hands of specialized real estate entities.

**Introducing risk management**
Real estate management organizations need considerable financial activity to operate normal risk management, to be able to equalize fluctuations in the operation and to endure loss of income for real estate not being leased or as a result of market price fluctuations. Such risk management is not integrated in the present system in any formal manner as there are many different entities that take part in decision making for each property and therefore difficult to apply systematic risk management. It has been criticized that the state does not apply risk management in this policy area. The author of this thesis agrees with this and recommends that improvements be made in this area in a new system.

**Economies of scale**
The results from studies in this field which are e.g. discussed in chapter 2.9, it is evident that the effects of economies of scale have to be considered when decisions are made regarding the structure of public real estate management. Very small units are less capable of transferring the knowledge that is accumulated in one project to the next one and thus lose the efficiency gained by it. Also there is the risk in very small entities that real estate management is not the main duty of the employees and therefore they lack the specialization necessary in professional and profitable real estate management.
In Iceland the total scope of public real estate management is very small compared to the other Nordic countries and according to those criteria it would be considered advisable when considering the economies of scale that only one entity would handle the construction and management of all public real estate.

**Comparison of the alternatives**

If the above recommendation were considered and market based rent or cost based rent adopted and ownership of real estate transferred to public real estate management entities it is clear that *Alternatives A and E* are not suitable. These two options also score low in other areas and only have a total of two (+) each. These alternatives are therefore not discussed further.

*Alternative B – Three real estate management agencies* entails relatively small changes to the present system and therefore it could be relatively easy to adopt. The Government Real Estate already operates in this manner and small changes would be needed. However, the high school facilities and hospitals, which count for ca 70% of the agencies real estate volume, would then not be managed by them but instead there would be the property of various organizations which today manage their own real estate, e.g. property managed by the Ministry for Foreign Affairs (embassies and residences of ambassadors), prison facilities and defense related facilities. On the other hand the financial foundation of having three specialized organizations in a country of this size would have to be carefully considered. The University of Iceland and The National University Hospital of Iceland presently operate specialized units that manage and maintain their buildings. Experience has, on the other hand, shown that it is often difficult to resist the temptation of mix together the funds intended for the operation of the entities on the one hand and for maintaining and managing buildings on the other hand. This alternative gets 6 (+) of the eight possible in the table of comparison and should therefore be further examined.

*Alternative C – One real estate agency* entails the Government Real Estate managing all public real estate but the Government Construction Contracting Agency would continue handling new construction and maintenance projects.
This alternative has basically the same advantages as Alternative A, but in addition there is economies of scale and the problem with the Chain of Command is not present. The alternative scores full house in the comparison table and is therefore an alternative that should be considered thoroughly.

*Alternative D - A single real estate management agency and a merger of the Government Construction Contracting Agency and the Government Real Estate* entails considerable changes to the system and would probably be more time consuming and expensive to adopt than *Alternatives B and C*. What, however, makes this alternative interesting is that the specialized knowledge of the two organizations, the Government Real Estate and the Government Construction Contracting Agency in carrying out construction projects and managing real estate would be fully utilized, the economies of scale is unquestionable and all public real estate management would be in one agency. In addition to this the problem regarding the discrepancy between power and responsibility would disappear as the same entity would be responsible for all stages of the project. It would be easy for one combined agency to lead in regard to initiative and innovation in the construction sector.

Alternative D scores full house in the comparison table and is therefore an alternative that should be considered thoroughly.

In view of the above deliberation the author of the thesis recommends that the authorities launch a comprehensive review of the structure of the current public real estate management system in Iceland and subsequently enact an independent, comprehensive legal frame for the policy matter. The Alternatives B, C and D would be considered specifically in connection with the review.
4. Conclusion

During the fall assembly in 2009 Althing passed a law concerning amendment of various laws regarding the transference of administrative projects between respective ministries within the Government Offices (Alþingi, 2009). In an explanatory memorandum with the bill it says that the objective is to transfer management for various properties to the Ministry of Finance from the relevant ministries to ensure that knowledge regarding property management is concentrated in one place within the administration. As this change is to take effect no later than January 1st 2010 the Ministry of Finance has time to review and re-organize the structure of public real estate management, among others, in connection with its agencies the Government Real Estate and the Government Construction Contracting Agency.

In this thesis methods and strategies in public real estate management in Iceland have been examined and comparisons made with the other Nordic countries. The conclusion is that the structure in Iceland is noticeably different from the structure in the other Nordic countries. Therefore, it might be considered logical to further examine whether it is possible or even feasible, to improve the current system and make it more effective and efficient. Five alternatives are introduced as possible options in regard to the future structure of these affairs in Iceland. The advantages and disadvantages of each one of them are discussed and the conclusion is that three of them are viable for further consideration.

Even though the discussion between the Ministry of Finance, the Government Real Estate and the Government Construction Contracting Agency on the review and re-organization of these affairs has not been concluded when this is written, it is clear that the objective of the Icelandic authorities to re-organize the structure of public real estate management is in accordance with the proposals for a comprehensive review of the structure and methodology in public real estate management that have been presented in this thesis.
Works Cited


Fjármálaráðuneytið. (Mai 1993). Umbætur og nýskipan í ríkisrekstri. Sótt 20. 09 2008 frá Fjármálaráðuneytið:


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Bibliography


Fjármálaráðuneytið. (Mai 1993). Umbætur og nýskipan í ríkisrekstri. Sótt 20. 09 2008 frá Fjármálaráðuneytið:


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